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THE TIMBER TREES, TIMBER AND FANCY WOODS,

AS ALSO,

THE FORESTS,

OF

India and of Eastern and Southern Asia.

BY

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Third Edition.

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PREFACE TO THE THIRD EDITION.

Since the publication of the Second Edition of this work, large additions have been made to our knowledge of the Timber trees and Fancy woods of India. Mr. Fergusson's work on those of Ceylon appeared in 1863, and has greatly extended the information which Mr. Edye, Mr. Adrian Mendis and Mr. Thwaites had given regarding the timber trees of that island. Dr. Birdwood's "Bombay Products" was published in 1863 and again in 1865, with notices of the Bombay timber trees; Major Beddome and Dr. George Bidie have each furnished lists of the timber trees of the Madras Presidency, and added useful notes on the characters of their woods. Dr. Bennett's Gatherings of a Naturalist and Wanderings in N. S. Wales have supplied considerable information regarding the woods of Australia and Polynesia. Mr. Cameron appended to his recent work a list of the woods known at Singapore, and a list has been printed of the woods sent from Malacca, Penang and Singapore, to the London Exhibition of 1862. Dr. Hugh Cleghorn's Reports on the Punjab and on the Forests of Kulu and Kangra appeared in 1864; his extended Report on the Punjab woods at the Lahore Exhibition of 1864, was given in 1868, in Mr. Powell's Hand-book of the Punjab Products, and Dr. J. L. Stewart's work on the Punjab Plants, which appeared in 1869, has brought together all previous notices on the timber trees of the N. W. Himalaya. These publications, all of them of great value to India, have largely increased our knowledge of its timbers. Dr. Alexander Gibson, so many years Conservator of Forests of the Bombay Presidency, sent me very extensive notes on the trees and woods described in the Second Edition. Major Beddome, Conservator of Forests of the Madras Presidency, has also aided me. The several Indian Governments, at my request, desired reports to be made to me by those to whom copies of the Second Edition had been distributed, and I received information in large detail from the Revenue Departments of Calcutta, Madras and Bombay, from Mr. R. Thompson, Assistant Conservator of Forests, Gurhwal and Kumaon; from Lieutenant-Colonel Lake, Commissioner of Jhullundhur, from Major Pearson, Conservator of Forests, Central Provinces, from his Assistants, Mr. Jacob and Lieutenant Doveton, and the late Captain Philipps of the Madras Army, furnished me with a revised report on the trees of Purla Kimedy. So largely aided, I think that I have been able, in this edition, to bring our knowledge of The Timber Trees, Timber and Fancy Woods of India and of Eastern and Southern Asia, up to a level with our information of the present day. The work was originally undertaken with the hope of aiding in developing the resources of the country. A Second Edition was specially called for by the Government of India with a similar object, and in the same view this Third Edition has been prepared. Dr. Gibson and Captain Philipps have passed away from amongst us, but to the several Governments of India, to Messrs. Thompson and Jacob, Dr. J. L. Stewart, Majors Beddome and Pearson, Colonel Lake and Lieutenant Doveton, who have so willingly aided me, I tender my thanks.

EDWARD BALFOUR,
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Madras Army.

Madras, *20th December* 1870.

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PREFACE TO THE SECOND EDITION.

THE increasing difficulty of procuring timber of suitable dimensions and quality has been so much felt, that the Military Finance Department recently deemed it advisable to propose the establishment, in British Burmah, of a timber-purchasing agency on behalf of the Government of India. The Right Honorable the Governor-General in Council entirely approved of that scheme, and resolved that it should be carried out with as little delay as possible: and, at the same time, I was requested to arrange all the information respecting forest trees, which might be in my possession or which I could obtain from public or private sources, to be printed in a compendious form, for general use; hence, the appearance of this second edition of a work which was published in 1858. The form has been approved of by the Honorable the Governor of Madras in Council, in G. O., No. 2,145 of 21st June 1861. In the former edition, the timbers and woods were arranged according to districts, which necessitated repetitions, but the work has been re-written with a view of condensing and, by additions, bringing our information on the subject up to the present time. The trees and shrubs producing timbers and fancy woods have now all been arranged alphabetically, according to their recognized botanical or, where such has been unascertained, their vernacular names. From the many tongues spoken in India, it seems impossible to follow any other plan, if repetitions under different local names and under the names of the trees of different localities, are to be avoided. The Index should, therefore, invariably be referred to, as every name and synonym is there given. The Honorable the Governor of Madras, in Order No. 2,145 of 21st June 1861, commanded for me, free access to the records of Government in all departments: and I record, along with the authors whose writings have been consulted, the names of the officers of Government who have further helped me. The distances from other Presidencies have prevented me applying there, but in the course of inquiries during the past 20 years, the officers of Government have given a ready response to my applications for information, and when this small work on one class of the useful products of the country shall be circulated amongst them, I feel sure, that they will also accept my present invitation for help towards a third edition, with any information in their power. For, in my letter to the Government of Madras, undertaking this revision, I have mentioned that though the edition of 1858, was declared useful, it was but a first attempt to bring together all existing information, and that careful emendations through two or three successive editions, in the next ten years, will be required to make it a complete or exhaustive work.

It will be observed that I have placed under the scientific name which is recognized at the present day, the synonyms which are quoted by authors as names under which former authors have described the tree. With the increasing facilities for communication and the greater number of scientific botanists, a few years may now suffice to establish the correctness of these synonyms, the numbers of which have been owing to the difficulties which, as Dr. Wight explains* a residence in this country presented to the freedom of intercourse amongst the learned inquirers.

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* Scientific botany in India commenced with the arrival of Kœnig, a Danish physician: previous to this, plants had been collected and transmitted to Europe, of which descriptions had been inserted by Linnæus and others in their various publications; but, until Kœnig made his appearance, no one in India had studied the vegetation according to the Linnæan rules. His example was soon followed by many eminent individuals: among whom may be mentioned Jones, Fleming, Hunter, Anderson, Berry, John, Roxburgh, Heyne, Klein, Buchanan, Hamilton, and the venerable Rottler, the only survivor of the illustrious group. Most of these formed themselves into a society for the purpose of promoting Botany: plants were industriously collected throughout all the Peninsula, as well as in Ceylon, and were not unfrequently examined and named by the society in common; to such was usually added the word "*nobis.*" By degrees, however, their opportunities of meeting grew less frequent, and their confidence in themselves greater, so that Roxburgh, Klein and Rottler commenced attaching names without consulting with their friends: an interchange of specimens, however, still continued, so that it was rarely difficult for the one to know what was intended by the other. The value of such specimens was quickly felt, nor were they slow in transmitting them to Europe. Many of these plants were published in different works, sometimes under the name given by the donors: in other instances the name was changed, sometimes on the supposition that what was considered by the Indian botanists as a mere variety, was in reality a distinct species; sometimes on the still cruder idea, that a plant named by one of the Missionaries must be different from another of the same name sent by some other of the society. Frequently the change has been made without even quoting the original name as a synonym, a practice which has created much confusion, and given rise to great difficulty in unravelling the synonyms.—*Wight and Arnott's Prodromus, Vol. I, p. xi.*

It will also be seen that I have largely given the vernacular synonyms by which the trees are said to be known to the various people of these countries and in the several localities in which they grow: and I have done this because some inquirers put a high value on such synonyms. But, a reference to the notices under black wood, ebony, rose wood, sandal wood, iron wood, poon wood, red wood, &c., &c., will satisfy the mind that commercial names have relation merely to the physical appearances or characters of the woods, and with regard to local names, it is not probable that uneducated and often little civilized nations can be more suggestful in their designations: and I may here refer to the synonyms under "Tree" and to the article "Sumatra," to the names applied by many of the Malaya-nesian nations and races in the Archipelago from Sumatra eastwards to Borneo, to show that the name for one of our most famed woods of India, the "Poon," merely signifies, in those wide regions, any tree. It is said that the island of Luzon got its name from a voyager asking the name of that island of a woman who was grinding corn with a hand-mill. Imagining that the, to her, indispensable hand-mill was the object of his inquiries, she answered "Luzon" and gave the name by which the island is now known. Many similar errors must ever occur in the inter-communications of educated and uneducated people, and though useful to the extent of directing inquirers, I deprecate any unbounded reliance on vernacular names.*

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* It may, perhaps, be objected that we have not given native names; these we have intentionally omitted partly for the reasons stated, and in accordance with the observations made by Dr. Wallich at page 99 of the 2nd volume of his Edition of the Flora Indica. "I avail myself of this opportunity for remarking that the names which are given to plants by the natives of Nepaul, are in general very uncertain, and fluctuating; and that I shall only make use of them on occasions when I have reason to be tolerably satisfied as to their correctness." The soundness of which is further proved by a remark of Dr. Carey, at p. 415 of the same volume, in a note on the word *Mun-ko-koshee.* "The name here given as a Newar name, is, in the extract of Dr. Buchanan's letter, written *Mun-ko-koshee,* and is one out of hundreds which might easily be produced, of the mistakes which constantly occur when persons unacquainted, in some measure at least, with the languages, set down words from the mouths of natives. Dr. Buchanan spoke only Hindoosthanee, and a Newar man gave him, as a reply to a question, *Mun-ko-koshee,* a Hindoosthanee word, which means *pleasure or delight to the mind.* This might be the Hindoosthanee word by which the tree is designated by the Nepalese, but it is much more probable the man only intended to say, *it was a delightful tree.* The abovementioned circumstance, and likewise the great number of native names of plants, seemingly obtained with the utmost ease by other gentlemen who have merely run through a country as collectors (which however was not the case with Dr. Buchanan), added to the difficulty, I have myself found in obtaining names, and the uncertainty of those commonly obtained, fully dispose me to coincide with the suggestion of my friend Wallich in his note at the foot of page 99." The supposed native names given to De Candolle and Jussieu by Leschenault, along with the specimens collected by him in the southern parts of the peninsula, corroborates strongly the opinion of Dr. Carey: they are in general a mere burlesque on names, meaning often that the natives *had no name for the plant* or *did not know it:* in other instances, it appears to have been not the name of the plant but the name of the village near which it was found, which had been marked down. Dr. Wight has frequently received six or eight names, totally distinct from each other, and formed from very different roots, for the same plant, within a few miles of each other: in short, the natives seem to have no rule either for nomenclature or orthography, they have no means of producing an uniformity of names, and very frequently confound one name with another, so that our inserting these would only tend to mislead, in place of proving an aid in the investigation of an unknown plant, by one acquainted with Botany. Owing to very different plants having the same native name, we have occasionally known dangerous mistakes originate, by erroneously substituting active medicines when those of an opposite kind were intended, and *vice versa*. On these last grounds particularly, we not only think it useless but injurious, nay even dangerous, to insert these names, unless the natives themselves shall have discovered some method by which a plant shall be known throughout by but one name, and that name shall be restricted to the individual plant.—*Wight and Arnott's Prodromus, Vol. I, p. XXIII.*

Fine flowering and useful plants being general favourites among people of every tongue, each nation seems desirous that every known plant (50,000 in number) should have a name in its own language; and no people insist on this privilege more strongly than the English, nor any with less reason, since they have not English names for many of their own indigenous plants, though the whole English flora scarcely furnishes 1,500 flowering species, nor for above a few hundreds (apart from mere translations of botanical names) for upwards of 20,000 exotics now in cultivation in their stoves and conservatories. We must bear in mind that in India, as in England, the same plants have different names in different provinces, and not unfrequently the same name is given to a variety of plants, or *vice versa*, a great variety of names to the same plant, rendering the knowledge of very difficult acquisition, and when acquired of comparatively little value. Added to these impediments to the acquisition of a correct knowledge of vernacular names of plants, we know that these names, being preserved not by description and figures which limit them invariably to the same species, but by tradition, are therefore in course of time, through mistakes of persons repeating them, liable to change by being applied to plants different from those, to which they were originally given, the only way indeed to account for the wide discrepancies often found in the names given to the same plants by different persons speaking the same language. For these, in my opinion, weighty reasons, I trust I shall not be blamed from seldom introducing native names into the body of this work and indulging the hope, that those desirous of obtaining a correct knowledge of

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PREFACE.

Under the circumstances in which many of the trees were scientifically named and from the varied modes in use of spelling vernacular names with the Roman character, it will readily be supposed that, in the one case, doubts exist as to some trees and, in the other, as to whether others are not repeated under different spellings of the same word. In some places my notes will be observed inquiring as to the correct scientific name or the correct spelling of the vernacular name. But, a general list of *Desiderata* is given—for which I have been indebted to Dr. Francis Appavoo in charge, in Madras, of the office of the Conservator of Forests, and of those who have the opportunity I ask assistance in supplying the required information. Also in my references to Dr. Roxburgh's Flora Indica, *Ed.* 1832, I have observed many large trees mentioned and many described as yielding valuable timber of which I have failed to discover any notices in other authors : I have not inserted such in the body of the work, as it is not apparent whether Dr. Roxburgh was, in so doing, describing solitary trees or trees common in a district : but, a general alphabetical list of such will be found arranged by me under the heading "*Roxburgh*," included in Dr. Appavoo's list of *Desiderata*.

In addition to quoting in an abbreviated form, the authorities for the notice of each timber tree, there will be found, at the end of the volume the full titles of the authors or other sources of information, as most inquirers will naturally desire to consult the originals, whenever available.

EDWARD BALFOUR,

MADRAS, 20*th December* 1862. *Surgeon Major, Madras Army.*

Indian plants, will for the future, as much as possible, adopt their botanical nomenclature. Being at the same time aware, that one, and not the least important, object of Botany is to fix these vascillating vernacular names, and render them useful towards the advancement of science by connecting them with their comparatively stable botanical ones, I am most desirous of receiving lists in different native languages, of the plants figured in this work, as well as the collections mentioned above, with a view to the formation of a comprehensive catalogue and index of both.—*Wight, Ill. Hind. Bot., Vol.* i. *Int. Notice, p.* ii.

I may mention that care is required against placing undue reliance on native terms. It is a very prevalent, though erroneous, impression that uneducated, and even wild, races possess accurate knowledge of natural objects, when in truth the whole of their thoughts through life are directed to procuring their own subsistence. In the preface to the Flora Andhrica, Mr. Walter Elliot gives as authorities Drs. Royle and Griffiths in favor of, and Drs. White, Wallich and Carey against, the use of vernacular names, yet he remarks that it is the "commonest and most useful plants that are known by definite and generally received appellations." Dr. Waring observes, in a recent number of the Madras Quarterly Journal, that an entire dependance on native names, without reference to botanical characters or sensible properties, will often lead into error, and Dr. Hooker, in his Himalayan Journals, mentions that throughout his travels he had been struck with the undue reliance placed on the native names for plants. A reference to the article Bulbul will show how variously a vernacular name is applied in Southern Asia, and it is the same everywhere. With the English in India, the rose-woods are products of different species, different genera and even different families of plants. The Iron-wood of Ceylon is from the Mesua ferrea, that of the Canara forests is from two species of Memecylon ; in Pegu, the Inga xylocarpa and the Inga bijemina, both afford woods known by this name ; that brought from Australia, is from a species of Eucalyptus, and the Chinese Iron-wood is from the Metrosideros vera. And innumerable examples of a similar character could be given. The same specific term is often applied by non-scientific people, to a whole genus, often to plants or animals having or supposed by them to have some similar characters or qualities. And in illustration of these remarks, if we trun to Mr. Elliot's Flora Andhrica, we find several names current amongst the Tiling people, for almost every plant. Thus, for the Abelmoschus ficulneus, the Andropogon muricatus, the A. schœnanthus, the Abrus precatorius, the Abutilon Indicum, the Acacia Arabica, all plants in every day use, these are various. The A. muricatus has eight, and the Abrus precatorius, six. The country through which Telugu is spoken is extensive and to this, perhaps, is owing such diversity of terms.—*Balfour's Cyclopædia of India, 2nd Supplement, Preface, p.* iv.

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PREFACE TO THE FIRST EDITION.

It had been suggested to me that persons whose avocations require them to attend to matters connected with the forests and with the timber trees, timber and fancy woods of India and of Eastern and Southern Asia, would find assistance in a manual indicating the botanical and vernacular names of the plants that furnish these useful products and which would also give some information regarding the characters of their different woods and their other economic products, noticing also the forests in which they grow and remarking on those plants towards the greater extension of which attention should be chiefly directed.

I too do not doubt but that there are people who would like to have such a hand-book; but what a private individual who would publish it must look to, is, how to secure himself from loss, and from the scanty European population residing in these countries, it may be questioned whether such a work would find buyers sufficient to cover the expense of properly producing it, an expense which would certainly not be inconsiderable. With a view therefore of ascertaining the public wants for such a work, when writing the article Timber in my "Cyclopædia of India and of Eastern and Southern Asia," I extended the notice to a length somewhat greater perhaps than the subject merited in a work of that character, and have now reconstructed the same into the present form. Those who have the former work need not therefore possess themselves with this, which is but a little more than a re-print of the article "Timber" in my "Cyclopædia of India," but if it be found that a work of this kind is indeed needed, the materials in my possession are amply sufficient greatly to extend this volume so as to supply the want.

133, Mount Road,
Madras, 23*rd Feb.* 1858.

EDWARD BALFOUR,
Surgeon, Madras Army.

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AB-ENEY. Tam. ? qu. Ebony ? According to Colonel Frith, a large tree of the Palghat jungle: wood of a brown colour, used for furniture. Not now, traceable.—*Colonel Frith, Beddome.*

ABIES SMITHIANA. *Wall.*

Pinus Smithiana.
,, morinda.
Pinus Khutrow.
Himalayan Spruce.

Rai ; Sarei of the Panjab.
Raiyang ; Kandre of Kanawar.
Re ; Ro ; Rau ; of the Sutlej.
Rag of Lahaul.
Kuchan or Kachal of Hazara.
Kauli of Panjab.
Tos or Tosh of Chamba.
Wesha. N. W. Him.
Bang. ,,
Sungal. ,,
Pustul. ,,
Ban Luddar of Murree.

A handsome tree common at from 5,500 to 11,000 feet in the Panjab Himalaya and growing also in Kafiristan and west of the Indus. Trees 130 to 140 feet high are to be seen, and from 10 to 21 feet in girth. The timber is soft and light, often with much sap-wood, and it is not much valued as it splits readily, though when under cover, it lasts pretty well. It is used in building, for shingles and in house-carpentry. It is, however, the least valued of all the Himalayan conifers. Its synonyms Pinus Smithiana, P. morinda and P. khutrow are mere varieties of Abies Smithiana.—*Dr. J. L. Stewart,* p. 219, *Mr. Powell, Hand Book, Lt. Col. Lake, of Jullundhur.*

ABRUS *species,*

Young tha-ngai. Burm.

A tree of Moulmein. Used in ordinary building materials.—*Cal. Cat. Ex.* 1862.

ACACIA. This genus of plants contains about 360 species, which are found in the tropical parts of the Old and New worlds, and over all Australia. Many of them furnish strong useful woods and other economic products, as in their gums, fruits and extracts. Some of the trees of the South-east of Asia have not yet been determined specifically. In the plains of India, there are several of great value as timber trees, and five species, remarkable for the strength and durability of their wood, grow in the forests of Pegu, namely, Acacia sundra, A. stipulata, A. elata, A. serissa, and A. Smithiana. A. elata and A. stipulata being now transferred to the genus Albizzia. Wattle is a local name in Australia for the several species of acacia, and the Australian species A. robusta and A. stricta and others have been introduced into India at Ootacamund and at Madopúr.—*Eng. Cyc., Drs. McClelland and Bennett, Mr. Powell, Hand Book, Econ., Prod., Panjab,* p. 565, *Beddome.*

ACACIA *species ?*

Gouharea. Tel. Uria.

A tree of Ganjam and Gumsur. Extreme height 45 feet, circumference 4½ feet, and height from ground to the intersection of the first branch 15 feet. It is a wood of great strength and used, on that account, for sugar crushers, bandy wheels, ploughshares and rice pounders. The bark is employed for tanning skins. The tree being tolerably common is burnt for firewood.—*Captain Macdonald.*

ACACIA *species.*

Po-piah. Burm.

Grows in Tavoy. Dr. Wallich describes this as a very large tree, used for posts and rollers.

ACACIA *species ?*

Pain-ga-du. Burm.

Grows in Tavoy. But the Burmese pyn-ka-do is a name for the Inga xylocarpa.

ACACIA *species.*

Konk-koe. Burm.

A tree of Moulmein. Its wood is used for boats, carts, and other ordinary house-building material.—*Cal. Cat. Ex.* 1862.

ACACIA ARABICA. *Willd. ; W. & A.*

Mimosa Arabica, *Roxb.*

Amghitan. Ar.
Sumug Arabi. Ar.
Babul. Beng. Hind. [Mahr.
Nan-lung-kyen. Burm.
Babbul. Duk.
Kikar of Panjab.
Kali-kikar. Duk.
Babul tree. Eng.
Indian Gum Arabic tree. [Eng.
Shittim wood of the Bible.
Babula. Hind.
Kurru-vaylam. Maleal.
Samgh-i-Árabi. Pers.
Kari-velam. Tam.
Nalla-tumma. Tel.
Tumma chettu. Tel.
Barburamu. Tel.

Its Bark.

Kikkar. Hind.
Kichal. ,,

Its Gum.

Babul ka Gond. Hind.
Kikar ,, ,, ,,
Velam pisin. Tam.
Kari velam pisin. Tam.

Its Extract.

Akakia.

This yellow-flowered and rather ornamental tree is said to grow in Senegal, Egypt and Arabia. It is cultivated in Ceylon, and is met with in varying abundance throughout India. It is of rapid growth and requires no water, flourishing on dry arid plains and especially in black cotton soil, where other trees are rarely met with. In the western Dekhan of the Bombay Presidency, it is most frequent in the interior, less common on the sea coast and hardly known in its southern jungles.

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There are considerable forests of it south of Sukkur. It is rare in Rohilcund, but common about Delhi and profuse in the Central and Southern Panjab, with a girth of 9 to 16 feet, but is rare again north of the Salt Range and Trans-Indus. We do not find mention of it as occurring in Burmah, Pegu or Tenasserim. In Ganjam and Gumsur, it attains an extreme height of 25 feet with a circumference of 2 feet. In the Central Provinces it is small. Its sap-wood is white, its heart-wood of a brown or dark-brown colour, very hard and tough, much used for carts and mills, for plough-shares and other agricultural implements, the naves and felloes of wheels of gun carriages. It makes excellent tent pegs and for cog wheels, the teeth of machinery and blocking tackle, it comes next to box, and olive. In Nagpore, the maximum length of its timber is 14 feet, with 3½ feet of girth, but 10 feet long and 3 feet in girth is the average, and it sells there at 6 annas per cubic foot. The height from the ground to the intersection of the first branch is about 8 feet. It can never be had of large size, and is generally crooked, but, it is a very hard tough wood, and is extensively employed for tent pegs, plough-shares, sugar-cane rollers, for the spokes, naves, and felloes of wheels, for the knees and ribs of country ships, and generally for all purposes to which a hard-bent wood is applicable. It is not attacked by white ants. Although in great demand for ship-building, when so applied, it does not last above sixteen years. Amongst its other useful products, may be named its gum, bark and seeds, the latter being extensively used in the Dekhan for feeding sheep. The bark is very largely employed in the centre of the Peninsula, as a tanning material, and, when properly managed, makes a good leather, with a reddish tinge, though, in native hands, the leather is often porous, brittle, and ill-coloured. Dr. Buchanan mentions that, in Mysore, the bark was employed in the process of distilling rum; but, in saying this, he probably mistook another acacia. The ground bark mixed with the expressed seeds of the Sesamum orientale has been used as food in times of scarcity. A decoction of the bark makes a good substitute for soap, and is used in dyeing various shades of brown. It yields an abundance of transparent gum which flows out from incisions or fissures in the bark and hardens in lumps of various sizes and figures. This is used in India as a substitute for the true gum arabic, which is the product of A. vera. In the medicinal practice of the people, the bark is used internally as a tonic and astringent; in decoction, as a wash for ulcers, and finely powdered and mixed with gingelly oil, externally, in cancerous affections. Dr. Gibson, for years, advocated extensive planting of this useful tree, in the Bombay side of India, and several forests of it at Khangaum, Kasoordee and other places have been preserved. He tells us that the Acacia arabica, Babool, is most common in the interior; less so on the coast, and hardly known in the southern jungles. As the vernacular term Babul is generic, and applied in the Mahratta, Guzerati and Hindi to various species, there are, he adds, two if not three varieties or species, Babool, Ram kanta and Eree babool. The first is the most common species, the second less so, and distinguished from the first by its straight stem, and general appearance, resembling that of a gigantic broom. The wood is quite equal to that of the common Babool. The third species is distinguishable from the first by its more horizontal mode of branching; the smaller branches long and stretched out, the side branches from them going off at right angles nearly. The bark also is much more reticulated, broken, and corky than that of the other. The wood is very inferior, as regards its use for agricultural implements, house material, &c. The distinction between the two should always be kept in view as practically important. The pod of this third species, also, is much broader-margined, and very partially moniliform, and can be at once distinguished from that of the first two species, which is so contracted between each seed as to be nearly severed. The pods and tender branches of all the three species form important articles of food for sheep, goats, and cattle, from February to the beginning of the rains. The flesh of lambs fed on the pods has a flavour equal to that of the best Europe lamb.—*Captain Sankey, Drs. Wight, Cleghorn, Gibson, and J. L. Stewart, Mr. Rohde, Reports of the Juries of the Madras Exhibition, Dr. Riddell, Useful Plants quoted in Cyclopædia of India and Supplements, Captain Macdonald, Mr. W. Fergusson, Major Beddome, Lieut. Col. Lake, Mr. Powell, Major Pearson, Roxb.* ii. 557.

ACACIA ARABICA. VAR. Cupressiformis.

Kabuli Kikar. *H.*
Ram Babul. *H.*
Kabuli Bubbur. *H.*
Ram-babul. MAHR.

Dr. J. L. Stewart describes this as a well-marked variety, which grows like a cypress, with the branches closing up to the trunk. This variety is found in the Panjab: also in Bombay, where it is called ram babul, and in Sind where it has the Panjab prefix Kábuli bubbur, and trees of this kind are occasionally seen throughout the Dekhan, in the Dehli district, and are abundant between Gujrat and the Jhelum. Its timber is said to be less durable than the ordinary A. Arabica.—*Dr. J. L. Stewart,* p. 51.

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ACACIA CÆSIA. *W. & A.*

Mimosa cæsia. *L.*
Acacia tilliacca. *Buch.*
Acacia arran. *Buch.*
„ intsioides. *D. C.*

Tella Korinda. Tel. | Konda Korinda. Tel.

This scandent shrub grows in the Circars, Olipur, Monghyr and Saharunpore, wood said to be valueless.—*Voigt.*

ACACIA CATECHU. *Willd; W. & A.*

A. polyacantha. *Willd.*
A. Wallichiana. *D. C.*
Mimosa catechu. *Linn.*
„ catechnoides. *Wall.*

Khair. Beng.
Khaira-ghach. Beng.
Sha. Burm.
Sha-bin. „
Catechu Tree. Eng.
Khair. Hind.
Khaira. Hind.
Kheir. Mahr.
Khadiramu. Sans. Tel.
Rat-kihiri-gas. Singh.
Khwarech. Trans-Indus.
Wodalé or Wothalé. Tam.
Podala-mânu. Tel.

Its Extract.

Katha. Hind. | Kathu. Hind.

This tree grows in the West Indies, on the Malabar and Coromandel Coasts, in the Dekhan, the Northern Circars, is one of the most common trees of the Bombay Coast and its ghat jungles,—grows all through the Panjab, but well below Trêt, at Serampore, Monghyr, Rajmahal, Delhi, Nepal, Kamaon, the Morung mountains and Assam. It is common all over the plains and scattered over the hills of British Burmah; in great quantities in the forests of the Prome and Tharawaddy districts. Immense numbers of these trees are annually cut down and made use of for the extraction of catechu. There are several varieties differing in shade, specific weight and yield of Cutch, Kath, Katha or catechu. The tree attains its full height in 40 years. A cubic foot weighs from lbs. 56 to lbs. 70. In a full-grown tree on good soil the average length of the trunk to the first branch is 20 feet, and average girth measured at 6 feet from the ground is 6 feet. The wood is of a dark or deep-red colour, is not liable to be attacked by insects, is somewhat brittle, but is heavy, close-grained, hard and tough, and polishes well, possesses great strength and durability, and is considered more durable than teak. It resists the attacks of insects, and is employed for posts and uprights of houses,—for spear and sword handles, bows, &c., for agricultural implements, such as the shafts of ploughs, cotton machines, sugar mills, pestles for husking grain. The catechu, formerly known as Terra Japonica, is extracted from the heartwood of the trees. The Burmese variety called "sha," is common all over the plains and scattered over the hills of British Burmah.—*Drs. McClelland, Gibson, J. L. Stewart, Brandis, and Major Drury, Lieut.-Col. Lake, Mr. Powell, Major Pearson, Mr. R. Thompson.*

ACACIA CINERARIA. *Willd.*; *W. & A.*

Nela jami. Tel. | Chinna jami. Tel.

This tree is said to grow in the Circars. Character of wood not known.

ACACIA DEALBATA, a handsome tree, from fifteen to thirty feet high, most abundant in Port Philip and Twofold Bay, forming luxuriant groves on the banks of streams, between the parallels of latitude 34 and 30 degrees. It has been introduced on the Neilgherry Hills. Its bark contains a greater per-centage of tannin than any other acacia, and pays to ship to England.—*Simmonds, Beddome.*

ACACIA DECURRENS, or Black Wattle of Australia.—*Bennett's Gatherings.*

ACACIA FARNESIANA, *Willd.*

Acacia Indica. *Desv.*
Mimosa Farnesiana. *Willd.*
Mimosa Indica. *Poir.*
Vachellia Franesiana. *W. & A.*

Guya-babula. Beng.
Iri Babul. Mahr.
Kabuli kikar of Panjab.
Paharan kikar of Panjab.
Babul of Panjab.
Vilaiti kikar of Panjab.
Hanja Pushtu.
Vaday valli maram. Tam.
Kusturi. Tel.
Pectuma. „

Roxburgh says it is a native of every part of India. It is found in Assam, Bengal and the peninsula. It is not wild in the N. W. but Himalaya, is naturalised and grows there up to 5,000 feet. It is a large shrub or small tree armed with thorns, but, in waste places in the western Dekhan, where it occurs also in garden hedges, it is only a scrubby shrub. Dr. Gibson says its wood is only applicable for tent pegs and firewood, but Major Drury mentions that (in Travancore?) the wood is very hard and tough, and is much used for ship knees, tent pegs and similar work. This report, however, needs verification. In Europe, a delicious perfume is distilled from the flowers, and the tree exudes a considerable quantity of useful gum.—*Drs. Gibson and J. L. Stewart, Major Drury, Lieut.-Col. Lake, Roxb.* ii. 557.

ACACIA FERRUGINEA, *D. C.*; *W. & A. Pro.*, p. 273.

Mimosa ferruginea. *Roxb.* ii. 561.

Vel velam. Tam.
Woani. Tel.
Vuni. „
Anasandra. Tel.
Anachandra. „
Ausandra „

This tree grows throughout the Madras Presidency, on the Coromandel Coast, in the Northern Circars, and is found at Courtallum, in the Bombay Presidency. It attains a height of from 20 to 25 feet. The wood is strong and tough. The bark is very astringent and forms an ingredient in the manufacture of a kind of arrack.—*Voigt, Beddome, Drury.*

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ACACIA JACQUEMONTI. *Bentham.*

Kandiara of Jhelum.
Hanza of Trans-Indus.
Babbil of Salt Range, Sutlej and Beas.
Baburi Beas.
Bambul.

Ar. PANJAB.
Reru. ,,

Ajaurukh. PANJAB.
Gargusa. ,,

A small shrub of the Panjab with immense white spines. Bark used as an astringent in distillation.—*Dr. J. L. Stewart.*

ACACIA JULIBRISSIN.

Shirin, Kanáwar.

Var. Albizzia Lebbek.

ACACIA LATRONUM, *Willd.*; *D. C.*; *W. & A.*

Mimosa latronum. *Koen.*

Mimosa coringera. *Linn.*

Buffalo thorn. ENG.

Puki Tuma. TEL.

Common in the barren tracts of the Dekhan, and found on the Madras side of India.—*Voigt.*

ACACIA LEUCOPHLŒA, *Willd.*; *W. & A.*; *Roxb.*; *Corr.*

Acacia alba. *Willd.*
Mimosa leucophlœa. *Roxb.*

Mimosa alba. *Rottl.*
,, tomentosa ?

Reunjah. HIND. of Central Provinces.
Panicled Acacia. ENG.
Kikar. HIND.
Safed kikar. HIND.
Hewar. MAHR.
Nunbar. PANJ.
Reru. ,,
Karir. ,,

Jand. PANJ.
Raunj. ,,
Katu Andare. SINGH.
Vel-velam. TAM.
Vellai-tumma. TAM.
Tella-tumma. TEL.
Its Gum.
Vel-velam pisin. TAM.

It grows in the Dekhan, in the woods and hills of peninsular India, in Coimbatore, in some parts of the Southern Mahratta country, and in the Sholapore districts between the Bheema and the Kistnah rivers. It grows in the rakhs of the Panjab and is found from about Lahore along the arid tract to Delhi. Its specific name and its Hindi, Tamul and Telugu names are given from the whitish or pale-yellow colour of its bark, which in Southern India, is one of the ingredients used in distilling arrack. It grows to its full size in 20 years. In Coimbatore, the tree attains a medium size with a round head, but in the Dekhan, it is never of a size fit for anything beyond posts to small houses. The wood it furnishes, however, is strong, good and dark coloured, though generally small. It is easily distinguished by its panicled globular inflorescence and stipulary thorns. A tough and strong fibre, in use for large fishing nets and coarse kinds of cordage, is prepared from the bark by maceration after four or five days' beating. The Acacia leucophlœa ? under the Hindi name of Reunjah, is described as a tree of Jubbulpore and the Central Provinces, tolerably large, but wood readily injured by insects, coarse of grain and brittle. Dr. J. L. Stewart also states that in Lahore the wood is subject to the attacks of insects and is only valued as fuel.—*Mr. W. Jacob, Major Pearson, Cal. Cat. Ex.* 1862, *Drs. Wright and Cleghorn, Major Drury, Mr. Rohde, Voigt, Roxb.* ii. 558.

ACACIA MELANOXYLON, the Blackwood of Australia, is found principally in South Australia: it grows in good soil, and has a diameter of 1 to 1½ foot. The timber is tough and straight-grained, resembling lancewood, and is valuable for purposes in which elasticity and durability are required. The wood takes on a beautiful polish and would make handsome furniture. It bears a profusion of white flowers, and its seeds furnish abundant food for birds.—*Bennett's Gatherings*, p. 337.

ACACIA MODESTA. *Wall.*

Palosa Pushtu. PANJ.
Phala. ,,

Phalai. PANJ.

This tree is indigenous in the Salt range, and on all the low hills east to the Sutlej, and other parts of the Panjab, of which it is one of the characteristic trees, growing readily in poor sandy soils. It ranges from 5 to 12 feet in girth and 25 to 30 feet high. Its wood is inferior to babul, very dark-brown or nearly black, hard, strong, tough, heavy and durable; when green, a cubic foot weighs 69½ lbs., and when dry 53½ lbs. It is a favourite for cart wheels, sugar mills, plough stocks, wheelbarrows and shares, Persian wheels, mallets for cleaning cotton, &c., and for charcoal. It yields a gum like gum arabic.—*Dr. J. L. Stewart*, p. 55.

ACACIA MYRIADENA, is the Mara of Tahiti, where this tree grows to a height of 50 to 60 feet, and a circumference of 6 to 8 feet. Its wood is of a yellowish colour, durable and valuable for planks or spars.—*Bennett's Gatherings*, p. 400.

ACACIA MYRIOPHYLLA, *Willd.*; *Grah.*

Mimosa microphylla. *Roxb.* ii. 549.

Grows on the Khassia hills; wood unknown. The bark is used to make an intoxicating liquor.—*Roxb.*, *Voigt.*

ACACIA PENDULA, or Myall wood, exhales a pleasant perfume of violets. Myall, however, seems a name given in Australia, to several species of Acacia.—*Bennett's Gatherings.*

ACACIA PLANIFRONS, *W. & A.*; *Prodrom*, p. 276.

Umbrella Tree. ENG.

Sale. TEL.

This tree grows sparingly in several parts of the South of India, in Madura and Coimbatore, in the Ceded Districts, and in districts of the Bombay Presidency. A few trees are

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growing on the east side of the fortress of Bellary. Its wood is said to be good for ploughs.—*Dalzell, Major Beddome, Roxb.* ii. 549.

ACACIA RAMKANTA. Under this name, Drs. Gibson and Riddell describe an ornamental species of Acacia or a variety of A. Arabica, common in the Dekhan, though less abundant than A. Arabica, from which it is distinguishable by its straight, tall, erect stem and general cypress-like appearance, or resembling that of a gigantic broom, and the colour of its legumes. Its wood is quite equal to that of the Acacia Arabica, being hard and used for cart wheels, ploughs, &c., but the natives attach some superstitious notions to the tree.—*Drs. Gibson and Riddell.*

ACACIA SIRISSA ? *Buch ?*

Mimosa sirissa. *Roxb. ?* | Mimosa speciosa. *Jacq.*

Tseek-tha. Burm. ? | Durshuna. Tel.

A tree of Moulmein was sent to the London Exhibition of 1862 under these names. Wood reddish-colored and used for furniture, (*Cal. Cat. Ex.* 1862) and with the same botanical name and Vern. Syn. of Siriss and Sirin (*Punjabi*), Mr. Powell describes a Panjab tree a good avenue tree, with a dark-brown and hard timber, but little used except as fuel.—*Cal. Cat. Ex.* 1862, *Powell, Hand-Book, Roxb.* ii. 544.

ACACIA SUMA, *Buch.*

Mimosa suma. *Roxb.* ii. 563.

Sai kanta. Beng. | Tella chandra. Tel.

Grows in the Godavery forests and in Bengal. Wood very hard.—*Roxb., Voigt., Beddome.*

ACACIA SUNDRA, *D. C.*

Acacia chundra. *Willd.* | Mimosa sundra. *Roxb.*

Lall Kheir. Hind. Mahr.
Karangally maram. Tam.
Chandra. Tel.
Nalla chandro. Tel.
Sandra. ,,

This tree grows in the peninsula and the Sunderbuns, but varies in size, in different localities. Dr. Gibson mentions that it is common in the jungles of Bombay, but is there always scrubby, small and crooked ; and, though rather plentiful in the forests under the ghâts, he had not seen it of a size capable of affording planks. It is somewhat abundant in the jungles and a rather large sized tree. At Guntoor Mr. Rohde mentions he had obtained planks one foot broad ; that posts five feet long are procurable at 12 Rupees per 100, well suited for fencing, and that the natives regard it as the most durable wood for posts in house-building, though, from its non-elastic nature it is unfavorable to the holding of nails driven into it. The wood is, however, not obtainable in the market generally, in planks of any size. The wood is of a dark chocolate colour, very hard, heavy and very strong, a one-inch bar sustaining a weight of 500 lbs. It is also used for rice pestles. A resin similar to that which exudes from the A. catechu, is procured from this tree. The two trees are nearly alike, the uncertainty of the prickles absent or present, being a distinguishing characteristic of this one.—*Roxb.* ii. 562. *Mr. Rohde, Dr. Wight, Dr. Cleghorn's Reports, Drury, Useful Plants, Voigt.*

ACACIA TOMENTOSA, *Willd.*

Mimosa tomentosa. *Roxb.* | Mimosa Kleinii. *Poir.*

Sain-babul. Beng.
Salsain-babula. ,,
Elephant Thorn. Eng.
Jungle Nail Tree. Eng.
Ani mulla. Tam. ? ? ?
Kodi velo. Tam.

Grows in the north of Ceylon ; on the Madras and Malabar sides of India, common near Sholapore, in the Kandeish jungles and the Bombay Dekhan, and is found in Bengal. Its wood is tough and strong : flowers small, white, rather offensive.—*Voigt, Beddome, Fergusson, Roxb.* ii. 558.

ACACIA VERA, *Bauh.*

Acacia nilotica ? | Mimosa nilotica. *Linn.*

True Acacia Tree. Eng.
Gum Arabic ,,
Egyptian thorn. Eng.
Αγαθος αιγυπτιχη. Gr.

The Acacia vera is a tree of the African desert from Senegal to Egypt, and its leaves yield the camel the sole forage it can meet in those arid regions. Under the Singhalese name of Andere, Mr. Mendis describes this as a tree, growing in the eastern Ceylon provinces, the wood weighing 71 lbs. per cubic foot, and lasting 15 years, and used for cross bars of fishing dhonies and pins for wooden anchors. But, the Andere of Mr. Mendis is doubtless some other Acacia : the Katu-andere of Ceylon is the Acacia leucophlœa. The Acacia vera affords two products, one natural, the other artificial, namely, the acacia juice and gum arabic. The inspissated acacia juice, the Akakia of Dioscorides and modern Asiatics, is a solid, heavy, shining, brittle, dark-coloured substance, inodorous, insipid at first, flavour astringent, powder brown, soluble in water which it colours red. Dioscorides, and before him Hippocrates, have described and highly lauded the properties of this juice. It is obtained by pounding the unripe fruit, and expressing the juice ; this is thickened before the sun, and then placed in bladders in which drying gradually takes place. The little bladders of akakia found in Europe contain about 5 or 6 ounces each ; it is sold in the bazars of Bengal in thin, very black cakes, about the size of a rupee.—*O'Shaughnessy*, pp. 299, 300.—*Voigt*, 262, *Mendis.*

ACER, the Maple. Several species of maple grow in the N. W. Himalaya, and in the northern parts of India, in Nepaul, Sirmoor, Kumaon, Srinaghur, &c., of which the following are mentioned.

ACER CAUDATUM, *Wallich.*

Long-pointed Maple. | Mandal of Kula.

A native of the highest regions of Nepaul, Sirmoor, Kumaon and Srinaghur.—*Eng. Cyc.*, *Dr. Cleghorn.*

ACER CRETICUM, *Linn.* ?

Tilkhan, Jhelum, Panj.
Tilpattan, Kangra, ,,
Trekhana, Jhelum, ,,
Kitla, Chenab, ,,
Kakrai ,, ,,
Kukandra, Jhelum, Panjab.
Seran, of Kangra ,,
Mandar, Chenab Ravi
Tian, of Sutlej ,,
Kangla, Chenab ,,

This small tree grows at 3,500 to 6,000 feet on most of the great rivers of the Panjab from the Ravi, westwards. Its is of no special use.—*Dr. J. L. Stewart*, p. 30.

ACER CULTRATUM, *Wallich.*

Curve-eyed Maple. Eng.

Dr. Stewart does not attempt to separate Acer cultratum and Acer sterculiaceum, as they much resemble each other, often grow in similar or the same places, and are frequently confused. The following vernacular names are given by Dr. J. L. Stewart for both of them :—

Trekan ; tilpattar, killu J. of Panjab.
Tilpattar ; kilpattar, kanur K. of ,,
Hanzal, kanzal, kanzru, kakra, mandar, C. of Panjab.
Mandar, chirindi, R. of Panjab.
Mandar, kaura, ,,
Mandar, kanjar, kalindra, jarimu, laur S. of Panjab.

This and Acer sterculiaceum are handsome trees, which attain a great size. Acer cultratum is a native of Kumaon, Srinaghur, and the N. W. Himalaya, and grows along with Acer sterculiaceum, on all the rivers of the Panjab, up to near the Indus at 4,000 to 10,000 feet. Their timber is not particularly valued, but the burrs or excrescences on the stem are made into the ornamental drinking cups which sell high in Tartary.—*Eng. Cyc., Mr. Powell, Hand Book, Dr. J. L. Stewart,* M.D.

ACER DOBINEA, the Maple of Norfolk Island, is a very handsome tree, and its wood is used for cabinet work.—*Keppel's Ind. Arch., Vol. II,* p. 282.

ACER LEVIGATUM. *Wallich.*

Karandlu, Panjabi. | Karadlu, Panjabi.

The Polished Maple, is found in the woods of the higher mountains of Nepaul and Kumaon, and also in the alps of Sirmoor, where it acquires a trunk thirty or forty feet high and from three to four feet thick. Its growth is slow ; its timber is said by Dr. Wallich to be used by the inhabitants of Nepaul for rafters, beams, and similar building purposes.—*Voigt., p.* 92, *Eng. Cyc.*

ACER OBLONGUM, Mundar of Panjab, grows in Nepaul, according to Mr. Thompson, plentifully in the lower moist valleys in the sub-range of Kumaon, logs of 6 to 8 feet long and 4 feet in girth, obtainable. Its wood he says is of a flesh-colour with satin stains and is handsome and ornamental. Lt.-Col. Lake, Commissioner of the Jhullundur Division, mentions a timber tree of almost similar names, Munder, *Acer oblongatum*, which he says attains a good size, with a wood white, elastic, heavy, close-grained ; used for ploughs, cot frames and jhampan poles.—*Voigt*, p. 92. *Mr. Thompson, Conservator of Forests, Gurhwal, Lieut.-Col. Lake, Commr., Jhullundur Division.*

ACER STERCULIACEUM, *Wall.* Dr. J. L. Stewart gives to this Maple the same vernacular names as to *A. cultratum, Wall.*, and he does not describe them separately. It is called La-ur in Kanawar, and Tilpatra in Kashmir, with reference to the incised three-pointed leaves. Dr. Stewart mentions that A. cultratum, and A. sterculiaceum grow together on all the Panjab rivers up to near the Indus at from 4,000 to 10,000 feet, the A. sterculiaceum at greater heights. They are handsome trees, with a girth up to 12 feet, but the timber is not much valued. It is, however close-grained and tolerably strong, and in Kangra is used for making ploughs, bedsteads and jampan poles and drinking cups for export to Thibet.—*Dr. J. L. Stewart*, p. 30., *Mr. Thompson.*

ACER VILLOSUM, *Wallich.* The Shaggy Maple, is a very large tree, found on the Himalaya mountains, approaching the limits of perpetual snow, in Sirmoor and Kumaon.—*Eng. Cyc.*

ACHRAS SAPOTA, *Linn.* *Willde.*

Black Bully.	Eng.	Sapota Plum Tree.	Eng.
Common Sapota.	,,	Sime Ilupai maram.	Tam.
Bully or Bulli Tree.	,,	Sima ippa chettu.	Tel.

This valuable fruit tree, which bears the Sapodilla plum, has been introduced into India from South America, and is found about Goa and the Dekhan, and in gardens in other parts of India. Its wood is hard and close-grained, and in South America is reckoned of great value for the shingles for corn houses. The bark is said to be a good substitute for Cinchona. The seeds are aperient and diuretic : in over-doses they are dangerous. There is a variety with ovate or elliptic fruit, and one with a roundish, somewhat depressed fruit. The Tamil name means the foreign Bassia longifolia.—*Voigt*, p. 339, *Mr. Jaffrey, Dr. Riddell, Roxb.* ii. 181.

ACHOO is a tree of the forests of Ganjam at Gumsur, which attains an extreme height of 36 feet, with a circumference of 2½ feet. The height from the ground to the intersection of the first branch is 10 feet. It is supposed to be the Morinda tinctoria. It furnishes a light, hard wood, of which the stocks of all the Uria matchlocks are made. A pink dye is extracted from the root. It is not very common.—*Captain Macdonald.*

ACMENA ZEYLANICA. *Th.* 118.

Goda-maranda, SINGH.

A small myrtle-like tree of Ceylon, very ornamental; but timber, though tough, small and curved.—*Mr. Fergusson.*

ACTINODAPHNE. Several species of Actinodaphne grow in the South of India. In Ceylon, A. speciosa, Nees, grows up to elevations of 8,000 feet in the Central Provinces, and attains a height of 30 to 40 feet. The A. angustifolia, Nees, grows in the Annamullay, Neilgherry and Western forests. The value of the timber is not known.—*Fergusson, Beddome.*

ADANSONIA DIGITATA, *Linn.*

Adansonia baobab. *Gœrtn.*

Baobab tree. ENG.
Monkey Bread tree. ENG.
Ethiopian sour gourd.
Lalo Plant. ENG.
Papara pulia maram. TAM.
Ani pulia maram.

This plant has been naturalised in Ceylon and India, and may be seen at Madras, Negapatam, Samulcottah, Hyderabad, Bombay and Guzerat. Its trunk is very short, but, in girth it attains the largest size next to Wellingtonia gigantea of any known tree. As a timber tree, it is useless, the wood being spongy and soft; but fishermen use its fruit as floats for their nets.—*Usef.Plants, Dr.Ridd., Eng. Cycl., Voigt, Fergusson, Roxb.* iii. 164.

[21]. ADELIA SERRATA.

Dhanyali, Rajauri.

Has a dark green leaf and is used for holly.

ADENANTHERA BICOLOR. *Moon.*

Mas Moru gaha. SINGH.

A very ornamental Ceylon tree, with timber smaller than A. pavonina.—*Fergusson.*

ADENANTHERA FALCATA. *Linn.* A tree of the Moluccas.—*Voigt.* 259.

ADENANTHERA PAVONINA, *Linn.*

Rukto chandan. BENG.
Ranguna. ,,
Y-wai-gyi. BURM.
Red wood tree. ENG.
Ranjana. HIND.
Ku-chandana. HIND
Manjati. MALEAL.
Kámbhóji. SANS.
Madatiya-gaha. SINGH.
Manjadi. TAM.
Ani Gunda-mani. TAM.
Ani kundu-mani. ,,
Bandi Gurivenda. TEL.
Manseni Kotta. ,,
Bandi Guruvindza. ,,

This is a large and handsome tree, found in Malabar, the Circars and most of the forests of India. It is not very plentiful in Burmah, being widely dispersed; but it is met with in sufficient quantity in the Rangoon, Pegu and Toungoo districts. It grows in both peninsulas of India, in Sylhet, Bengal, Assam, and the Moluccas. The inner heart-wood of large trees, is deep red, hard, solid and durable, suitable for the purposes of the cabinet maker. As, in old trees, the wood is of a red colour, from this, in upper India, it gets its name of Rakto chandan, or red Sandal wood; but the true Red Sandal or Red Sandars wood of commerce, is the Pterocarpus santalinus. The wood is not procurable in any quantity. The wood is said to yield a red dye; ground to a paste with water, it is used by hindus to make the sectarian marks on their foreheads. The seeds are of a shining scarlet colour, with a circular streak in their centre, and are used as weights by jewellers, and as ornaments in the form of beads, bracelets, &c. Books represent these as usually weighing four grains, and they are in common use by the Burmese, as equivalent to that weight. The seeds, however, have to be selected for the purpose as many of them do not weigh more than two or three grains each. A cement is made by beating them up with borax and water. The pulp of the seeds mixed with honey, is applied externally to hasten suppuration in boils and abscesses, the natives in Travancore have an idea that, taken internally, they are poisonous, especially when in a powdered state.—*McClelland, Mason, Useful Plants, Juries' Reports, Madras Exhibition, Mr. Fergusson, Major Beddome, Roxb.* ii. 370, *Voigt.* 259.

ADHATODA VASICA. *Nees.*

Justicia a adhatoda. *Linn., Roxb.*

Bakus. BENG.
Basoka. ,,
Malabar Nut. ENG.
Aris. HIND.
Arus. ,,
Asganda. HIND.
Urus or Utarosha. SANS.
Adadodé. TAM.
Addasaram. TEL.

This shrub grows in Java, Ceylon, in both the Indian peninsulas, in Bengal, Nepaul and Sylhet, and is quite the characteristic plant of the lower hills of the Panjab. The wood is soft and considered very fit for making charcoal for gunpowder.—*Ainslie, Voigt., Powell, Roxb.* i. 126, *Voigt.* 488.

ÆGICERAS FRAGRANS. *Kon.*

Æ. majus. *Gœrt.*
Æ. obovatum. *Bl.*
Æ. floridum. *Rom.*
Rhizophora corniculata. *L.*

Pou kadel. CAN.
Heenkadol. SINGH.

A small tree of the coasts of India, growing in salt marshy places, with the mangroves. Wood, light and soft.—*Fergusson, Roxb.* iii. 130, *Voigt.* 336.

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ÆGLE MARMELOS, *Corr.*

Cratæva marmelos. *Linn.* | Feronia pelucida. *Roth.*

Bel. Beng.
Ouk-sheet. Burm.
Bengal Quince. Eng.
Larger wood apple. Eng.
Bel. Hind Mahr.
Tanghai ? or Tangul. Malay.
Kuvalam. Maleal.
Bil of Punjab.
Beli. Singh.
Vilva maram. Tam.
Márédu chettu. Tel.
Bilvamu chettu. Tel.
Vilva chettu. ,,
Malu-ramu chettu. Tel.

This is a large thorny tree with ternate leaves, growing throughout India, which flowers during the hot season, and its large spheroidal fruit ripens after the rains. The tree is common on the Bombay side, in waste places, inland forests, and old gardens. It is found in gardens in the South of India, and is not uncommon at different places below Simla to about 4,000 feet. It attains a height of 20 to 30 feet in Ghurwal. It grows about towns and villages throughout the Prome district and also about Toungboo, more especially on the Shan side of the river, where the large spheroidal fruit may be had in great quantity from the end of February to the end of July. The wood is light coloured, variegated with veins, compact and hard, but in India, is not used, partly perhaps from a religious feeling on the part of the hindus, with whom the tree is sacred to Siva and partly from the value of the tree from the great medicinal virtues of the fruit. It belongs to a family, the Aurantiaceæ or orange tribe, remarkable for the excellence of its timber, which is usually small. The wood is very strong, and, on the Godavery districts, the native dhol or drum, is often made of it. In Kumaon it is used for naves of wheels and sugar crushers. In Ganjam and Gumsur it attains an extreme height of 30 feet and circumference of 3 feet. The height from the ground to the intersection of the first branch, being 10 feet. The wood is ground with water into a sort of oily paste, which is poured on the lingum in the temples dedicated to Siva. The leaves are offered to Siva and to the female energies in the same way that the leaves of the Toolsee are offered to Vishnoo. The fruit is delicious to the taste and very fragrant. It is smooth, resembling an orange, with a yellow hard rind, which is astringent and used in dyeing yellow. The fruit has been long in use, in diarrhœa, and its aperient and detersive qualities and its efficacy in remedying habitual costiveness, have been proved by constant experience. It has lately been brought into repute when fresh and in conserve as a remedy in some kinds of dysentery. When dried before it is ripe, the fruit is used in decoction in diarrhœa and dysentery, and when ripe and mixed with juice of tamarinds, forms an agreeable drink. The mucus which surrounds the seeds is, for some purposes, a very good cement ; Dr. Gibson says the beautiful ready-made varnish which surrounds the seeds, will one day be turned to use in the arts. The roots, bark and leaves are reckoned refrigerant in Malabar. The bark of the former, especially, is given, in decoction, in intermittent fever, and the leaves are applied as a poultice in ophthalmia. They abound in a volatile fragrant bitter exciting oil. In Ceylon, a fragrant perfume known as marmala water, is distilled from the flowers, and is much used by the natives as a perfume for sprinkling on visitors. Lest the resemblance of the Wood apples to the fruit of the Nux vomica might give rise to accidents, their strong aromatic smell like that of all other fruits of the orange family, to which they belong, will distinguish them easily from the Nux vomica, which is devoid of aroma.—*Drs. McClelland, Wight, Mason, Gibson, Riddell, Waring, O'Shaughnessy, and J. L. Stewart, Col. Lake, Mr. Fergusson, Mr. R. Thompson, Useful Plants, Mr. Elliot. Roxb.* ii. 579.

ÆSCHYNOMENE ASPERA, *Linn.*

Æ. indica. *Wall.*
Æ. lagenaria. *Lour.*
Æ. aquatica. *Roxb.*
Hedysarum lagenarium, *Roxb.* iii. 365.

Phul-sola. Beng.
Shola. Hind.
Sola. Hind.
Attukedasa. Maleal.
Diya-siambala. Singh.
Attunette. Tam.
Jilugu bendu. Tel.
Jilugu. Tel.
Niru jilugu. Tel.

This plant grows in moist or marshy places in India. Its pith is much used for making hats, bottle covers, artificial flowers and models of temples, and fireworks.

AGATHIS AUSTRALIS?

Dammara Australis.

The Kawrie or New Zealand Pine, one of the Coniferæ, in its native forests, attains a considerable height, with a straight clean stem, which, from its lightness and toughness, has been found well calculated for the masts of ships. It was introduced into the Bombay Horticultural Society's Gardens.—*Dr. Riddell, Eng. Cyc.*

AGATHIS LORANTHIFOLIA ? *Salisb.*

Dammara loranthifolia.
The Dammar Pine.
Pinus dammara. *Linnæus.*

A large tree, found on the very summits of the mountains of Amboyna, Ternate, and many of the Molucca Islands. When young, it has something the aspect of a young cedar, the wood of which it is said to resemble. Griffith mentions it as a member of the Tenasserim Flora, and Dr. Mason has seen the young plants of the tree, to which Griffith referred and which the Burmese call Theet-men or Tree Governor. The leaf is precisely that of the dammar pine, but the Tenasserim tree is not known to yield any dammar. The

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timber of the Archipelago tree is represented to be light and of inferior quality, wholly unfit for any situation exposed to wet, but answering tolerably well for in-door purposes. The wood of the Tenasserim tree is white, rather light, bears a considerable resemblance to some kinds of pine, and is used by native carpenters for various purposes; the Burmese have a superstition that the beams of the balances of their scales, ought to be formed of this wood.—*Drs. Mason, and Riddell, Eng. Cyc.*

AGATI GRANDIFLORUM, *Desv.*

Agati coccinea. *Desv.*
Æschynomene grandiflora, *Roxb. L.*
Coronilla grandiflora. *Willde*
Coronilla coccinea. „
Sesbania coccinea. „

Buko. Beng.
Augasta. „
Agati. Maleal. Tam.
Buka. Sans.
Agisi. Tel.
Avisi. Tel.

This tree is easily recognized by its flowers. It is seen in every town and village of the Tenasserim Provinces, and in the betel gardens of Peninsular India, where it is much cultivated for shade, and as a trellis for the support and shelter of the Piper betel. It grows also in Bengal and Assam. Its wood, called in the Circars, Auguste wood, is soft, and of no use in carpentry or cabinet work, only fit for fuel, but the tree grows with great rapidity, and could be usefully planted to shelter young trees of slower growth. There are varieties of the Agati, some with variegated and some with red flowers, and the leaves and flowers of a white variety, known in Tamul as the Agati-kire-pu, are used in soups, curries and as greens. On the Madras Coast, the legumes which are 12 to 18 inches long are not frequently eaten, but they are a favorite vegetable with the natives of Burmah. Medicinally, the bark is a powerful bitter tonic: and the leaves are used, in infusion in catarrh, as an aperient.—*Roxb.* iii, 330, *Mr. Jaffrey, Drs. Riddell, Mason, Useful Plants, Mr. Elliot, Dr. O'Shaughnessy, Voigt,* 216.

AGLAIA MIDNAPORENSIS, *Carey.*

A. grata, *Wall.*

This tree grows in the forests of Midnapore. Wood not known.—*Voigt,* 136.

AGLAIA ODORATA, *Lour.*

Camunium Sinense, *Rumph.*

This tree grows in Cochin-China and China. Wood not known.—*Voigt,* 136.

AGLAIA SPECTABILIS. A large tree, met with along the banks of rivers in the Pegu and Tounghoo districts. It affords a light serviceable timber, somewhat stronger than the American Pine, and capable of being wrought with little labour. Wood, red-coloured, strong and adapted for house-building.—*McClelland.*

AHGUIL. *Tam.?* A light, yellow-coloured wood of Travancore; specific gravity 0·74. Very abundant; used for furniture.—*Col. Frith.*

AHLI-NE NGAI. *Burm.* A tree of Moulmein. Used for ordinary house-building purposes. Leaf is eaten boiled as greens.—*Cal. Cat. Ex.* 1862.

AH-NAN. *Burm.* A tree of Tavoy and Moulmein, probably the Fagræa fragrans, *Roxb. Will. Griff.*, (the Cyrtophyllum fragrans of *Falconer*). That of Moulmein, is described as a strong wood, good for building purposes. That of Tavoy, as a strong, hard, and very durable timber used in ship-building.—*Cal. Cat. Ex. of* 1862, *Captain Dance.*

AH SEE E-HA. *Burm.* A tree of Moulmein. Wood hard, used for making musical instruments.—*Cal. Cat. Ex.* 1862.

AILANTUS EXCELSUS, *Roxb.* ii, 450.

Maruk. Mahr.
Peru mara. Maleal.
Aralu. Sans.
Peru maram. Tam.
Pedda manu. Tel.
Pey yápa. Tel.

This tree grows in many localities, in Coromandel, Surat, Baroach, and Baroda. It resembles the ash in its general appearance, but attains a larger size; flowering in January and February. It is common about old buildings and in raviny ground of the Dekhan and of Guzerat, about Baroach and Baroda. It is seldom found as a tree in the Bombay forests. It is common in the Northern Circars, and in the Godavery forests and is met with in Coimbatore. The wood is light and not durable. Dr. Wight says it was described to him as hard, close-grained and heavy, and fit for gun-stocks, and he had been told that it is much used in Bombay, in cabinet-making, but greatly doubted the correctness of the information, in which Dr. Gibson concurs. Dr. Cleghorn in the Madras Exhibition Jury Reports, describes the wood as light and white, and Voigt and Cleghorn and Graham say it is used for making sword handles, &c. It is also employed to make sheaths for spears, also, catamarans, but is not durable. On the Godavery, the natives never use it.—*Drs. Wight, Cleghorn, Riddell, Useful Plants, Mr. Elliot, Mr. Jaffrey, M. E. Juries' Reports, Captain Beddome, Voigt.*

AILANTUS GLANDULOSUS. *Desf.*

A tree of China and the Moluccas. Wood not known.—*Voigt,* 186.

AILANTUS MALABARICUS, *D. C.*

Mudde doop. Can.
Matti Pal of the Kaders.
Peru mara. Maleal.
Walbolin-gas. Singh.
Peru maram. Tam.
Peru chettu. Tel.

A large tree, it occurs in Ceylon, is

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common in Travancore, also occurs in the Animallay forests and Malabar. It has rather an ornamental appearance from its dark, shining pinnate leaves. In Canara and Sunda, it is common near the ghats above. According to Dr. Wight, the bark is rough, very thick, and studded with bright garnet-looking grains, apparently of a resinous nature, which do not, however, dissolve either in spirit or water. The bark has a pleasant and slightly bitter taste, is considered a tonic and febrifuge, and is given in cases of dyspepsia. It yields a fragrant resinous juice, known as *matti pal*, which was first noticed by Buchanan. This reduced to powder, mixed with milk, and strained, is given, in small doses, in dysentery, and reputed to be an excellent remedy, owing chiefly to the balsamic properties of the resin. Wood soft, said to be worthless. The fruit, triturated with mango and mixed with rice, is reckoned useful in cases of ophthalmia.—*Useful Plants, Dr. Gibson, Mr. Fergusson.*

AKYAB. The woods sent from here to the Exhibition of 1862, were as under ;

Artocarpus.
Baibga.
Bamaw.
Bhoot-tha.
Bignonia stipulata.
Champac.
Chahoong.
Chenebroon.
Crandoop.
Crawndow or kyoung-thya
Dipterocarpus, *sp.*
Eleocarpus.
Erythina Indica.
,, *sp.*
Garcinia *sp.* parawah.
Inhayon.
Iron wood or Pyeng.
,, ,, Pya.
Kalat nothee.
Ka-moung.
Ka-ugan.
Khoongho.
Khouk cinh.
Kran dao.
Kupoop.
Ky-oung-thya.
Mootsomah.
Pr-bhan.
Pa-ran-yan.
Proonbajah.
Rajaw.
Rambabha.
Taboot.
Taiaboukbha.
Talaz.
Thabra king.
Tha-bya.
Thadoop.
Theuganet (Tilsa.)
Thoonghun.
Thoungthalaz.
Tonuggaugaw.
Thing.
Thy.
Thykado.
Thynan.
Thyzauhoong.

ALANGIUM LAMARKII, *Thwaites*,

Syn.

Alangium decapetalum, *Lam.*
Alangium tomentosun, *Lam. D. C.*
Alangium hexapetalum, *Roxb.*

Ragh-ankra. BENG.
Akar-kanta ,,
Anisaruli mara. CAN.
Sage-leaved alangium. ENG
Akola. HIND.
Akarkanta. HIND.
Ankulo. MAHR.
Ankul. ,,
Angolam. MALEAL.
Kara Angolam. MALEAL.
Unkotha nicochaka. SANS.
Unkola nicochaka. ,,
Ankolamu. ,,
Ankola. ,,
Nico-chaka. ,,
Ee petta ? SINGH.
Alinji maram. TAM.
Ankolamu. TEL.
Uduga. TEL.
Udugu. TEL.

This is a small tree found in Ceylon, Coimbatore, Cochin and throughout the Peninsula of India. It attains an extreme height of 30 feet, with a circumference of 2½ feet, the height from the ground to the intersection of the first branch being 12 feet. It is common on the Bombay side, both in the open country and in some of the jungles towards the coast, but, there, it is less a jungle tree than one found in hedges and village lanes. It grows in the Khassia hills, in Assam, up to the base of the Himalaya, and is found in the Malay Peninsula and in Cochin-China. The wood beautiful, and tough but small. It is said by Dr. Roxburgh to be beautiful, and in Dr. Wight's experiments, he found it sustain a weight of 310 lbs., but neither Dr. Wight nor Dr. Gibson had ever seen a ten-inch plank, and Mr. Rohde says it wants size ; Captain Beddome, however, describes it as an ornamental, beautiful wood, attaining a fair size in the forests of the Godavery and Circars. In Ganjam and Gumsur, the leading bull in a herd of buffaloes, has a wooden bell called "Lodoko," attached to its neck. This is heard at a great distance in the jungle, and is always made of this wood, which is said to be peculiarly sonorous. Excepting this, the wood appears to be used only for firewood. Roxburgh says of A. hexapetalum, Wood beautiful. The root has a reputation in snake bites.—*Drs. Wight and Gibson, Mr. Elliot, Voigt, M. E. J. Rep. Mr. Rohde, Captain Beddome, Mr. Fergusson, Captain Macdonald in M. E. Proceedings, Useful Plants.*

ALBIZZIA : *Species.*

Kokoh. *Burm.*

This tree grows in the Northern districts of Pegu, on and near the hills of British Burmah. The wood is valued by the natives as much as Padouk (Pterocarpus Wallichii) or even more so. It is used for cartwheels, oil presses and canoes. In the Prome district, under the Burmese rule, a special tax was levied on the felling of "Kokoh" and "Padouk." Large trees are becoming very scarce in the Irrawaddy valley, but are not uncommon in the Tounghoo district. A cubic foot weighs 48 lbs. In a full-grown tree on good soil, the average length of the trunk to the first branch is 60 feet and average girth, measured at 6 feet from the ground, is 12 feet.—*Dr. Brandis, Cal. Ex. Cat. for* 1862.

ALBIZZIA AMARA. *Boivin, Benth. W. & A. Willd.*

Mimosa amara., *Roxb.* ii. 548.
Mimosa pulchella, *Roxb.* ii. 548.
Acacia Wightii. *Grah. W. & A.*
Acacia amara. *Willd.*

Bel Kambi. CAN.
Lallye. MAHR.
Narlingi. TAM.
Shekram. ,,
Wunja maram. TAM.
Nalla regu. TEL.
Nella-renga ?? ,,

This tree grows in Coimbatore and throughout the Madras Presidency, and is common in

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the more inland jungles of the Bombay presidency, but less so on their coasts: Dr. Gibson says it grows about the ghâts of Canara and Sunda, not inland and not north of the Gungawalli river. It is a tolerably large tree in Coimbatore, but of rather low stature. Its flower is very beautiful. The wood is of a handsome dark colour and hard, and the heart-wood is beautifully mottled and veined. In the Bombay presidency, the the wood is always very crooked, otherwise, when ripe, it is strong and tough, and might be applicable to domestic purposes. From its black color, the natives of Canara and Sunda deem it (wrongly) a species of ebony.—*Roxb.* ii, 548, *Drs. Wight, Gibson, Beddome, Fergusson.*

ALBIZZIA ELATA.

Acacia elata. *Graham. Wall.*
Mimosa elata. *Roxb.; Wall.*

Seet. Burm.
Thaeet-tha. Burm.
Chikul mara. Can.
Dhoon Siris. Panjabi.
Baro. Panjabi.
Safed Siris. ,,
Kareo of N. W. Prov.
Tella sopara. Tel.

This very handsome large tree grows in Ceylon and is pretty common in Canara and Sunda, both above and below the ghats. It occurs in the Godavery forests, in Dehrah Doon, is cultivated in the Panjab, N. W. Provinces, and grows in Kumaon, Assam, on the banks of the Irrawaddy and Ataran and in Tavoy. Plentiful in the Pegu, Tounghoo and Prome districts, and very abundant all along the sea-shore from Amherst to Mergui. Its maximum girth 4 cubits, and maximum length is 18 feet. When seasoned, it floats in water. Its timber is straight, lengthy and of large girth. The wood is red, and is hard and strong and very durable. It is much valued for bridges, house buildings and house posts. It is adapted for cabinet making, and of sufficient girth to be advantageously employed in Government buildings, and for packing cases. Dr. Brandis, writing of it, says that it is abundant throughout the plains of British Burmah, particularly near the banks of rivers, and its wood may, at a future time, become an important article of trade. The heart-wood is strong and durable, and less heavy than that of most trees of the same family. The only drawback is, that the proportion of sapwood is large. Breaking weight, he says, 250 lbs. A cubic foot weighs 42 to 55 lbs. In a full-grown tree on good soil, the average length of the trunk to the first branch is 40 feet, and average girth measured at 6 feet from the ground is 10 feet. It sells at 12 annas per cubic foot.—*Roxb.* ii, 546, *Voigt, Captain Beddome, Drs. Gibson and McClelland, Captain Dance, Madras Artillery, Dr. Brandis, Cal. Ex. Cat. of* 1862, *Mr. R. Thompson, Dr. J. L. Stewart, Mr. Fergusson.*

ALBIZZIA LEBBEK, *Benth.*

Acacia speciosa, *Willd.; W. & A.*
Acacia serissa, *Buch.*
Mimosa flexuosa, *Rottl.*
Mimosa sirissa. *Roxb.*
Mimosa speciosa, *Jacq.*
A Mollis *var.* Julibrassin, *Benth.*

Sirisha. Beng.
Seet. Burm.?
Sirris. Hind. Panj
Sirissa tree. Eng.
Lasrin. Panj.
Lasrian. ,,
Shurungra ,,
Mathirshi ,,
Sirin. ,,
Kali sirin. Panj.
Siri. ,,
Sirisha. Sans.
Suriya mara. Singh.
Kátú-vagai. Tam.
Vel-vaghai maram. Tam.
Dirasana chettu. Tel.
Sinduva chettu ,,
Sirissee. Uria.

This large tree, as will be observed by the number of its botanical synonyms, is difficult of identification: but, Dr. Stewart supposes that under these names are even yet included, several of the wild species of acacia, which grow well in the Himalaya, from the Indus eastward, at 2,200 to 5,000 feet of elevation. This, the Mimosa sirissa of Roxburgh, is, in the Madras Exhibition Juries' Reports, stated to be the Acacia serissa which is extensively planted along the banks of the Ganges canal. Dr. Gibson seems to refer A. speciosa to A. odoratissima, and to think that the Bombay Sirris and Ran Sirris are not different. The tree grows throughout the Madras Presidency. In Ganjam and Gumsur, it is very plentiful, and attains an extreme height of 30 feet and circumference of 4½ feet, the height from the ground to the intersection of the first branch being 22 feet. It is there used for sugar crushers, pestles, mortars, and ploughshares. It is common in the forests of the Bombay Presidency, grows in Travancore, on the Coromandel Coast, and is a common tree in Coimbatore where it is frequently grown by the road sides for the shade that its large head affords. It is a large tree, and plentiful in Pegu, particularly in the Tounghoo district, and it is found on the Irrawaddy and may exist in the Tenasserim Provinces. Like the Seet of the Burmese, A, elata, described by Drs. Mason and McClelland, Albizzia Lebbek is a tree of large size and rapid growth, but Albizzia elata is said to have a red wood or of a dark colour, and that of Albizzia Lebbek as white or light-coloured. The timber is easily procured in Madras, and is white or light-coloured, very durable and very hard and strong, for Dr. Wight found a 1½ inch bar to sustain 560 lbs., and it is much used for beams in building. Major Beddome says it should be felled in the cold season. The term Julibrassin is a corruption of Gul abresham, meaning silky flowered.—*Roxb.* ii, 544, *Drs. J. L. Stewart, p.* 55, *Mason, McClelland, Cleghorn in M. E. J. R., Wight in M. E. P., and Dr. Gibson in Bomb. Geo. Soc. Journal, Capt. Macdonald, Mr. Fergusson, Major Beddome.*

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ALBIZZIA ODORATISSIMA, *Benth.*

Acacia odoratissima, *Willd ; W & A.*
Acacia lomatocarpa, *D. C.*
Mimosa odoratissima, *Linn. Roxb.*
Mimosa marginata, *Lam.*

Fragrant Acacia. Eng.
Chechua. Gond.
Sankæur. „
Sirsa. Hind.
Sirris. Mahr.
Ran Sirris. Mahr.
Karintha karra. Maleal?
Siri of Panj.
Sui „ „
Lasre „ „
Polach „ „
Drek „ „

Tandai C. of Panj.
Karmbru B. „
Karmru B. „
Karha „
Buna of Kaghan.
Surree mara. Singh.
Karu vagai. Tam.
Sela-wunja. „
Sælæ maram? „
Shinduga. Tel.
Telsu. „

This tree grows in Ceylon, all over the peninsula of India, and in any soil, on the coast or in the interior, and it is found in Bengal, the Panjab, Assam, the eastern provinces of Burmah, Pegu and Tenasserim. It grows in the Panjab valleys at 2,500 feet to 5,000 feet up to the Chenab river. Its timber in the Panjab is said to be soft and only fit for fuel. In the Madras Presidency, about Coimbatore, it is of rapid growth and in considerable abundance, attaining the height of 30 to 40 feet. It often attains a good size in the Bombay Presidency, but, in Nagpore, it is only in gardens that its dimensions are great, the timber it yields in other localities being, as a general rule, of small scantling. It is, even there, however, obtainable in beams from 15 to 18 feet long and three feet in girth, at 5 annas per cubic foot. In Coimbatore, beams one foot square are procurable. The heart wood is dark-coloured, turning almost black with age. The wood is strong and heavy, is a smooth timber to work, and takes a good polish, the grain being ornamental, though rather open. It has an outer ring of white wood, of from 2″ to 3″ in Nagpore, but which, Dr. Gibson says, is, in the western Dekhan, always 3-4ths of the whole. This part alone is assailable by white ants: but, by being creosoted, could probably be made a useful railway timber. All accounts describe its heart-wood as strong, hard and heavy; in Nagpore of sufficient size to form rafters, and excellently suited for naves and felloes of wheels, but there is an uncertainty as to its powers to bear moisture. A beam an inch and a half square sustained a weight of 570 lbs. It is used for naves and felloes of wheels and in house building. The oil manufacturers of Nagpore use it for their mills, and it is there generally employed to make carts. The wood is said to deserve being better known for the general purposes of carpentry.—*Roxb.* ii. 546, *Voigt, Captain Beddome, Captain Sankey, Drs. Mason, Wight, Cleghorn, Gibson, McClelland, & J. L. Stewart, Major Drury, Cyclopædia of India, and 1st and 2nd Supplements, Mr. Powell, Major Pearson, Mr. W. Fergusson.*

ALBIZZIA PROCERA, *Benth.*

Acacia procera, *Willd ; W. & A.*
Mimosa procera, *Roxb.* ii. 548.

Tella sopra. Tel. | Pedda patseru. Tel.

This tree is cultivated in Ceylon but is not indigenous there. It grows in the peninsula, in the Madura district, on the Neilgherries, on the Godavery and in the N. Circars. Its wood, especially the dark heart wood, is very good.—*Roxb. Mr. W. Fergusson, Major Beddome.*

ALBIZZIA STIPULATA, *Boiv.*

Acacia stipulata, *D. C.*
Mimosa stipulata, *Roxb.*
Mimosa stipulacea, *Roxb.*
Acacia Kangraensis, *Jameson.*

Amluki. Beng.
Boo-Mai-za. Burm.
Sirin of the Panjab.
Lasrin on the KishnGanga.
Oi or ohi of Kangra.
Surangra of Panjab.

Kasir of Panjab.
Ola „
Durgari „
Hulan-mara. Singh.
Chinduga. Tel.

This unarmed Acacia, with flowers of a pink colour, is one of the largest trees of the genus. It is met with occasionally to the west of the Jumna and abounds in the Kangra valley. It grows in Kumaon and in the N. W. Himalaya to altitudes of 3,000 to 6,000 feet and reaches 7 to 9 feet in girth. It is found in Dera Dhoon, in the mountains north of Bengal, in Travancore, Courtallum, in most parts of the peninsula of India It is common on elevated ground throughout the forests of British Burmah, in the forests from Rangoon to Tounghoo, and on the banks of the Ataran river. Dr. Gibson does not mention its existence in the Bombay forests, nor is it known to be found in Tenasserim. It yields a large heavy timber, heart-wood of a reddish colour, close grained and strong, and adapted to cabinet-making, furniture and other purposes. The wood is much prized for cart-wheels, and is also used for the bells of cattle. The heart-wood is often beautifully streaked, but rather small, the sap-wood being very large. Mr. R. Thompson says that in Kumaon logs are obtained 20 to 30 feet long and 4 to 6 feet in girth, but that the wood is not easily worked. A cubic foot weighs 66 lbs. In a full-grown tree on good soil, the average length of the trunk to the first branch is 30 feet, and average girth measured at 6 feet from the ground is 9 feet. It sells at 12 annas per cubic foot.—*Dr. Brandis, Cal. Ex. Cat. of* 1862.—*Roxb.* ii. 549, *Voigt, Drs. McClelland, and J. L. Stewart, Majors Drury and Beddome, Mr. R. Thompson, Mr. W. Fergusson, Mr. Powell.*

ALEURITES TRILOBA, *Forst. Roxb.* iii. 629.

Camirium cordifolium, *Gært.*
Juglans camirium, *Lour.*

GSL

Ak[illegible] Beng. Hind. Malay.
Malbal. Pers. ? ?
Belgaum Walnut. Eng.
Country Walnut. Eng.
Molucca tree. Eng.
Hijli Badam. Hind.
Kamiri. Jav.
Tiaily. Tahiti.

This tree is a native of the Society Islands, from which it was introduced into India; a variety of it, the A. Moluccensis, is known to the Javanese under the name of Kamiri. A. triloba is now indigenous in several parts of India, the Moluccas, the Malay Islands, Ceylon, plentiful near Hyderabad of the Dekhan, in the Southern Mahratta country, about Belgaum, in Bengal and in Assam. Almost all parts of it are covered with a farinaceous substance, and a gummy matter exudes from the seeds (as also, it is said, from the tree itself), which is chewed by the natives of Tahiti. The tree grows to a large size, but the quality of its wood is unknown. In Tahiti, tissues are made from the bark, but its most valuable product is its fruit, which is roundish, two-celled, each containing a nut resembling in flavour the filbert or English walnut. They are considered aphrodisiac in the Moluccas, but are apt to purge and produce colic, unless roasted, or kept for a year. About 50 per cent. (or according to Simmonds, 31½ gallons of the nut yield 10 gallons) of a useful, fine clear lamp oil, is expressed with very little difficulty and simple machinery, from the kernels of the nut, and the oil-cake is a good food for cattle and useful as manure. About 10,000 gallons of oil are yearly produced in the Sandwich Islands, and, in Ceylon, where it is manufactured, it is known as Kekuna oil. It is so bland as to be used for the table in Java, as well as for burning. In the Sandwich Islands the nuts are employed for candles. A number of them, strung upon a stick, will burn for hours, giving a clear and steady light. The tree grows readily from seed, and might be easily cultivated.—*Roxb.* iii, 629, *Mr. Jaffrey, Dr. Riddell, Useful Plants, Madras Exhibition Jury Reports, Hogg's Vegetable Kingdom, Simmonds' Commercial Products, Voigt.*

ALHAGI MAURORUM, *Tourne; W. & A.*

A. mannifera, *Desv.*
Nepaulensium, *D. C.*
Ononis spinosa, *Hasselq.*
Manna Hebracia, *D. Don.*
Hedysarum alhagi *Linn. Willd. Roxb.*

Juvasa or Juwasaa. Beng.
Camel Thorn. Eng.
Shutur-khar. Hind. Persian ? ?
Juwansa. Hind.
Zoz. Trans-Indus.
Zozan „ „
Jojh. Pers.
Tamiay of Sutlej and Ravi.
Jawa, jawasa, jawan, Plains of Panjab.
Giri karnika. Sans. Tel.
Yasa. Sans.
Tella-giniya chettu. Tel.

This shrub grows in the deserts of Egypt, Syria, Mesopotamia, Beluchistan, Sind, in the arid parts of the Panjab, in Kandahar, Herat, Persia, in Guzerat, the Southern Mahratta country, at Monghir, Benares, and Delhi. It sends forth leaves and flowers in the hot season, when almost all the smaller plants die, and affords a grateful food for the camel, in desert places. The Hebrew manna exudes from its leaves and branches when in its flowering season.—*Roxb.* iii. 344, *Voigt, Dr. J. L. Stewart.*

ALNUS, *Sp.* The Alder.

Clethropsis nitida, *Spach.*

Srol; Shrol, Jhelum and Kashmir.
Sawali. Kashmir
Silein.
Rikunra Jhelum.
Kunsh Sutlej.
Niu „
Rajain Baree Doab.
Champ Chenab.
Tsapu „
Piak „ and Spiti.
Koe Ravi „
Gira „
Ghuzbe „

Dr. Stewart is inclined to think that the alders which he had seen in the Panjab Himalaya, in the Peshawar valley, and the Bari Doab, were of one species or nearly allied. The tree is handsome, is 90 to 100 feet high and 10 or 12 in girth. The wood is white, is said to be weak, but is used for bedsteads and for the hooked stick of rope bridges. It is also made into charcoal.—*Dr. J. L. Stewart*, p. 197.

ALNUS NEPALENSIS,

Himalayan aldar.

Kunch or koish. Panj.
Ghujbai, Pashtu; also gira, both species of Alnus.
Nyu, Kanawar.
Shrol, Hazára.
Piák, Pangi.

The timber of this tree is firm, hard and difficult to cut, of a pale, brownish-red colour. It is used for gunpowder charcoal, but not for iron furnaces. The bark is useful in tanning. Other species named are Alnus obtusifolia and A. nitida (Sutlej), called "Shrol" in Kaghán. Also in Chota Lahaul and on the Chenáb, there are species of Alnus, called "Piák" and "Asápú," but Dr. Stewart regards all as one species.—*Mr. Powell, Hand Book.*

ALPHONSEA LUTEA, *H. F. & T.*

Uvaria lutea, *Roxb., Corr., W. & A.*

Muvi. Tel.
Muvvi. „
Chirr dudduga. Tel.
Musi. „

This tree grows in the ravines of the N. Arcot hills, in the Circar mountains and in Orissa.—*Roxb.* ii, 666, *Beddome.*—See Uvaria.

ALPHONSEA ZEYLANICA, *H. f. et. Th.*, grows in Travancore and at Courtallum.—*Beddome.*

ALSEODAPHNE SEMICARPIFOLIA, *N. ab. E.*

Woewarana-gaha. Singh.
Raano or grain wood. Tam., at Batticaloa.
Javerue (Yaverne). Tam., at Trincomalie.

This grows in the Animallay, the Western Ghats and Courtallum, and is a common and gigantic forest tree near Batticaloa and Trincomalie. Its wood is of a light yellow color, and said [illegible] to be liable to warp. Some specimens of it that Mr. Fergusson worked upon had the grain much confused, but in general it has a free straight grain and is easily worked. Logs of large dimensions of it can be procured at Trincomalie, it has been exported for some years past under its native name of *Yaverne.* Mr. C. A. Krickenbeek, who was stationed for some years at Batticaloa, informed Mr. Fergusson that the wood of the *Raane* resists the attack of the teredo and wood-boring insects, and that it is consequently much used in that district in the construction of boats, &c. Mendis Modliar's original dried specimens of this plant, No. 93, "*Wea Warene*" from the Central Province, and called "*Cratæva Roxburghii,*" and though not in flower, Mr. Fergusson has no doubt of its being identical with the tree now described. Wood used for house-building and pestles. Mendis.—Excellent wood and much used at Trincomalie as a substitute for deal.—(*Wright,*) *Mr. W. Fergusson.*

ALSOPHILA EXCELSA, the Tree Fern of Norfolk Island, measures forty feet in height, and has a magnificent crest of fronds. The black portion of the trunk is used by cabinet makers for stringing.—*Keppell's Ind. Arch., Vol.* II, *p.* 184.

ALSTONIA SCHOLARIS, *R. Br.*

A. oleandrifolia, *Lodd.* | Echites scholaris *Linn.*

Lutiana.	Assam.	Rukattana.	Singh.
Chatinn.	Beng.	Ir-elli-palai.	Tam.
Let-htuk	Burm.?	Eda-kula-ariti.	Tel.
Kori-kowan.	Mahr.	,, ,, pala.	,,
Satwin.	,,	,, ,, ponna.	,,
Pala.	Maleal.	Pala garuda.	,,
Mukampala.	,,	Pala chettu.	,,
Ayugma parma.	Sans.	Eda-kuta nati.	,,
Ayugma chadda.	,,		

This handsome-looking tree grows in the Moluccas, Bengal, to a very large size up to 3,000 feet in Ceylon, and in the South Konkan. In Canara and Sunda it is not very common ; but it is found near the Ghats above and below of great size. Its existence in Nagotna was not known, and it does not grow inland from Bombay, but grows freely enough in their Botanical Gardens. It is found in the Animallay and Western forests, it grows in the Travancore forests, in the moist valleys of Kumaon, in Burmah ? and in Assam. It seems to be known to the Malay race, the excellent boards of thin planks it affords being used by Malay and Indian children to write their lessons on, hence its name. The whole plant abounds in a milky juice. Its wood is light, white and close-grained but rather coarse, and in Assam is much prized for beams and light work, such as boxes, trunks, scabbards, &c. It is valuable for the turning lathe and, in Ceylon, is used for coffins and packing cases. It is as bitter as gentian, and, it is said, is possessed of similar virtues. The bark is a powerful tonic.—*Voigt.* 526, *Dr. Mason, Hogg's Vegetable Kingdom,* 516 *Useful Plants, Dr. Gibson, Mr. R. Thompson, Mr. W. Fergusson.*

ALSTONIA VENENATA, *R. Br.*

Echites venenata, *Roxb.*

It is figured by Dr. Wight in his Icones (436), is found on the Pulney Hills but its properties are not known. Voigt. says it and A. neriifolia are shrubs, and A. macrophylla and A. spectabilis are trees of Penang.

ALTINGIA EXCELSA.

Araucaria excelsa, *H. K.*

The Norfolk Island Pine is seen 100 feet above the other forest trees, and resembles the Norway spruce, but its tiers are more distant. Its timber is not of good quality, as it soon rots when exposed to the weather, and the teredo, or auger worm, makes fearful ravages in the fences made of its timber, which seldom stand three years. It is generally used for building purposes, flooring, partitions, &c., and when kept dry and not exposed to the weather is more durable.—*Keppell's Voyage of the Meander*, p. 282.

AMANOA COLLINA, *Baillon.*

Cluytia collina, *Roxb.*

Woadugu maram.	Tam.	Vodisa.	Tel.
Wodesha.	Tel.	Kurseea.	,,
Kadishen.	,,	Kursee.	,,

A small tree, frequent in the Circars, in the Palghat, Salem and Walliar jungles of Coimbatore, not found by Dr. Gibson, on the Bombay side. Flowers in hot season, seeds ripen in December and January. Bark or outer crust of capsule said to be exceedingly poisonous. Wood red-coloured, exceedingly hard and durable but of small size. Notwithstanding its hardness, being very even-grained, it is easily worked and is, from its fine close grain, a pretty wood.—*Roxb.* iii. 732, *Voigt. Mr. Rohde's MSS., Drs. Wight, and O'Shaughnessy*, p. 552, *Major Beddome.*

AMANOA PATULA, *Thw.*

Cluytia patula, *Roxb., Fl.,* Ind. iii. 733.

Pala?	Tam.	Jegura.	Tel.

A tree of Southern India, growing in the Circars, in the ravines of North Arcot, the Animallay and Western forests, furnishing a very fine close-grained heavy pinkish or chocolate coloured wood, hard and durable. It grows to a large size, and logs measuring 4 to 5 feet in girth, are purchased in the market. The wood is hard, very brittle, of specific gravity 75·8, and, when broken, the fracture seldom shows any fibre. It is used for rulers, k[illegible]s, handles for tools, such as chisels, &c., and in turning. Mr. Rohde says, it is a much larger tree than C. collina, and is a native of moist valleys amongst the Circar mountains. It flowers during the hot season. Roxburgh says, the wood of this tree is of the colour of dried rose leaves, also hard and durable. Mr. Fergusson says, it grows in the hotter parts of Ceylon, but only as a shrub or small tree.—*Roxb.* iii. 733, *Voigt.*, *Mr. Fergusson*, *Mr. Rohde's MSS.*, *Voigt.*

AMANOA SPINOSA ? ? ?

Cluytia spinosa ? ? ?

Korada. URIA.

A tree of Ganjam and Gumsur, extreme height 30 feet, circumference 3 feet, and height from ground to the intersection of the first branch, 8 feet, Has a light wood, used for rafters, spinning wheels and door frames, it is also burnt for firewood, the tree being very common. The leaf is used medicinally for itch. The bark of this tree is poisonous, and a preparation of it is often used for the purpose of destroying life, particularly by Ooriya widows among whom suicide is a frequent occurrence.—*Captain Macdonald.*

AMBALETA. A small tree or shrub, growing in the forests of Ganjam and Gumsur, attaining the extreme height of 12 feet with a circumference of 1½ feet. The height from the ground to the intersection of the first branch is 3 feet. The character of its wood is not known. The juice of the leaves is mixed with preparations of mercury and taken internally for rheumatism and other diseases.

AMBOYNA WOOD.

Lingoa wood. | Kaya-boca wood.

A fragrant wood of various colours, used in cabinet work in England. There are several varieties of this very beautiful wood used in England, all beautifully mottled and curled, of various tints from light-red to dark-yellow, and always in small lumps, being evidently excrescenes or burrs cut from the trees. The varieties of Amboyna wood are principally used for inlaying and by the makers of ornamental snuff boxes.—It is brought from Ceram and Amboyna and at the Great Exhibition of 1851, it was sent from Singapore. The tree or trees from which this fancy wood is obtained, are not determined but Pterospermum Indicum has been by some indicated and by others rejected. See Lingoa wood, Kyaboca, Pterospermum Indicum.—*Archer, Faulkner, Lond. Ex. J. Reports, Fergusson.*

AMHERST PROVINCE furnished the following 90 woods to the Great Exhibition of 1851, which will be found described under their respective names :

1 Anan.
2 Ban-boay.
3 Ban-kha.
4 Bep-than.
5 Bhai-bya.
6 Bhyeng-tseng.
7 Bijion.
8 Daup-yat.
9 Dien-neeung.
10 Eng.
11 Eng-gyeng.
12 Gan-gan.
13 Gyo.
14 Ka-theet-nee.
15 Kha-boung.
16 Kiep-dep.
17 Kiep-maup.
18 Kiep-yo.
19 Koup-ha.
20 Kza-nan.
21 Kya-zoo.
22 Kyway-thoay.
23 Kywon.
24 Kywon-bo.
25 Kywon-gaung-noay.
26 Lammay.
27 La-phyan.
28 Lep-dwat.
29 Lieun.
30 Liep-yo.
31 Mala-ka.
32 Ma-thloa.
33 Maza-neng or Maga-neng.
34 Meet-gnyoo, or Neet-gnyoo.
35 Meng-ba, or Ming-ba.
36 Moma-kha, or Mornakha.
37 Mou-tha-ma.
38 Myaup-loaut.
39 Myaun-ngo.
40 Mya-ya.
41 Na-kyeen.
42 Naoo.
43 Nga-soay.
44 Nyaung-lan.
45 Oun-thuay.
46 Pad-dan.
47 Pa-ngan.
48 Pa-ra-wa.
49 Peng-lay-oun.
50 Pinnai.
51 Povin-gunyet.
52 Pyeen-ma.
53 Raung-thmoo.
54 Seet-seen.
55 Tan-labet.
56 Taup-sha.
57 Teng-khat.
58 Thab-ban.
59 Tha-bwot-gyee.
60 Tha-byion.
61 Tha-khwot.
62 Thammai.
63 Than-kya.
64 Thanna-Dan.
65 Tha-nat.
66 Than-that.
67 Theet-phyion.
68 Theng-gan.
69 Theet-to.
70 Theet-ya.
71 Theim.
72 Thep-yeng.
73 Toung-bien.
74 Toung-tha-khwa.
75 Toung-tha-byiou.
76 Toung-thau-gyee.
77 Tseet.
78 Tsekka-doun.
79 Tshan-tshay.
80 Tshaup-yo.
81 Tshiet-khyeen.
82 Tshwai-lwai.
83 Tsoay-dan.
84 Tswot-ba-lwot.
85 Yammandy.
86 Yeng-taip.
87 Yetha-byay.
88 Yoya-theet.
89 Zee-byion.
90 Yeng-bywom.

Captain Dance gives, from Amherst and Tavoy Provinces, and Mergui Archipelago, the following list of 114 woods which, also, will be found described under their several names.

1 Lagerstræmia pymmah. Peema Nee.
2 Calophyllum longifolium. Therapee.
3 Tee ka loung or Tha or Kadat-Ghee.
4 Sibia glomerata, Thayt PewTha or WhiteThayat
5 Artocarpus echinatus. Mountain Jack or Tong By-ne.
6 Xylocarpus granatum, Penlaypyoung or Penglay-oun.
7 Heritiera litoralis, Konzozaloo or Kanazoe.
8 Heritiera minor, Manazoe.
9 Kannan Tha or Crab Tree.
10 Kaya Nan in Tavoy, Kaiyah in Moulmein.
11 Parrawah.
12 Tha Byke or Tha-bay-Kya.
13 Gongoo or Gangaw.
14 Ancestrolobus carnea ; Toungala in Martaban Provinces, Zoengalay in Tavoy.
15 Bong long Tha.
16 Tha nat Khee.
17 Tay-tha.
18 Mai tai Yo.
19 Kya-Mouk.
20 Pa-ka-than.
21 DilleniaSpeciosa.Thee-Bew-Tha.
22 Kye-zai : Laurus.species
23 Myouk sho or Monkey tree, (also called Moulmein Lance wood, Dalbergia.
24 Careya arborea. Ban Bambhooai.
25 Kye yo Thoo.
26 Sow-yew.
27 Shorea robusta. In-Jin or Enghyen
28 Melanorrhea usitatissima ; Theetsee.
29 Fagraea fragrans, Annan-Tha or Annau.
30 Hopea odorata. Thingan
31 Inga xylocarpa. Pyeng Khadoo.
32 Hopea odorata. Thingan Pew.
33 Acacia elata, Thacet-Tha
34 Pet-Than.
35 Mezzale.
36 Moonaban ; Apocynaceæ
37 Laurus (Sassafras). Carrawaytha, or Sassafras wood.

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38 P[illegible] Tha or Than-
39 Maikay ; Murraya, species.
40 Pterocarpus dalbergiodes.
41 Pinatha.
42 Ta-Kouk Tha in Tavoy, Yay Mine Burm.
43 Tim Book Tha.
44 Them-Mai Tha.
45 Vateria lanceolata ; Pantheya or Panthitya.
46 Kyaitha or Itchwood.
47 Cheo Neb or Stinking Wood.
48 Kyet Thay or Thee-ay Kyay.
49 Dagoo Tha.
50 Kanyeen Tha or Wood Oil Tree.
51 Ka Meen Tha.
52 Young tha.
53 Neen Tha.
54 Pew Bock.
55 The-La-Bay.
56 Mong-dayat nee or Red Mong dayat.
57 To Dooryan or Forest Dooryan.
58 Book Tha.
59 Tay Yo Tha.
60 Thay Yo Tha.
61 Maneeoga.
62 Mah yuh gah.
63 Thah Byay Nee.
64 Thee Khya Tha.
65 Dow Yat.
66 May-byoung.
67 Pee Ma Pew or White Peema.
68 Na Pew Gee or Let Thouk Gee.
69 Tha Yingee.
70 Tha Nat Thayt Pew Tha.
71 Kha Moung Tha.
72 Ka theet Tha.
73 In-Jin Pewoo, Whit Injin.
74 Thah yay Bew.
75 Thay kya Ba.
76 Thay tha.
77 Thah Byay Ynet Ghee.
78 Tha Pyke Tha.
79 Kyai Yew.
80 Toung Bye Nay.
81 May Shoung.
82 Tha Bate Kee.
83 Mong-Dayat Pew, or White Mong-Dayat.
85 Kab-Ban-Tha.
86 Kyee Tha.
87 Tha Bong Pew.
88 Koung Moo.
89 Na Yoo ya.
90 Khai Yah.
91 Dalbergia latifolia ; Yendaik, Black Wood.
92 Phyoo.
93 Tye Yoo Tha or Lan Thah.
94 Phet Honway.
95 Ouk Guay.
96 Ngy-soung Tha.
97 Na Ghee.
98 Tayet Khyee.
99 Murrh Neen.
100 Yemmanee.
101 Soway Do.
102 Thayet Kya.
103 Chin Zooay.
104 Than That.
105 Yeen Gat.
106 Moketammatha.
107 Gyew.
108 Piulay Jallat.
109 Bee-ew, not identical with Thee Bew Tha.
110 Kussoo.
111 Kyai tha.
112 Phangah.
113 Tunyeen or Tanyeen Dha.
114 Ebony. Diospyros, Tai.

AMOORA ROHITUKA, *W. & A.*

Andersonia rohituka, *Roxb*
Meleaca Wightiana, *Wall.*
Sphærosacme rohituku, *Wall.*

Tikta-raj. BENG.
Chayan ka-yoe. BURM.
Hurin-hara. HIND.
Harrin-Kharra? HIND?
Chem-maram. MALEAL.

A native of the Peninsula of India, the Aunimullay, Travancore, Bengal, Moulmein, and found in the forests of Tounghoo though scarce. The wood is white-coloured and adapted to every purpose of house-building. The seeds yield an oil, which is used for many economic purposes.—*Roxb.* ii. 213, *Voigt, McClelland, Useful Plants, Beddome.*

AMYGDALUS COMMUNIS, *Linn.*

Louz. AR.
Kataping. BALI. JAV.
Badamsi? BURM.
Badam. DUK. GUZ. HIND. MALAY. PERS.
Amandelin. DUT.
Almond. ENG.
Amandes. FR.
Mandelu. GER.
Badam-i-Farsi. HIND. PERS.
Mandorli. IT.
Amygdale dulces. LAT.
Louzan. MALAY.
Amendoa. PORT.
Mandel. RUS.
Inghurdi. SANS.
Walu luway. SINGH.
Almendra. SP.
Parsi vadam maram. TAM.
Parsi badama chettu. TEL.

The almond tree, sometimes cultivated in the Panjab plains.

AMYGDALUS PERSICA, The Peach.

Aru. PANJ.
Ghurghustai, Pashtu.
Mandala ,,
Rek of Kanáwar
Chimnánú, Lahaul, Chenab.
Arua—?

Dr. J. L. Stewart gives as other vernacular names, in the North-Western Himalaya, Simmu ; Tsunu ; Arui ; Bem ; Beimi ; and Gwareshtai and Gargashtai across the Indus. He thinks that he has seen it growing wild in several places at 3,000 to 6,000 feet, but it is cultivated in Kanawar up to 10,000 feet, and in Lahoul up to 9,000 feet, and probably higher in Ladak. Wood good, but not available in quantity. In Kashmir, its fruit is good. *Dr. J. L. Stewart, Mr. Powell.*

ANACARDIUM OCCIDENTALE, *Linn.*

Acajuba occidentalis, *Gærtn.*
Cassuvium pomiferum, *Lam ; Rheede.*

Kaju. BENG.
Hijli badam. BENG.
The-ho-thayet. BURM.
Cashew nut tree. ENG.
Kaju. HIND.
Hijli badam. HIND.
Jambu-monat. MALAY.
Parunkimavah. MALEAL.
Acajou of S. America.
Kaju-gass. SINGH.
Kola mavah. TAM.
Mundiri maram. ,,
Jidi mamidi. TEL.
Munta mamidi chettu. TEL.
Its Gum,
Hijli badam ka gond. HIND
Mundiri pisin. TAM.

This small tree was introduced from the West Indies, and is now cultivated in Ceylon, all over India, in Burmah, Pegu, the Tenasserim Provinces and Tavoy. It is very ornamental when in leaf, is about sixteen feet high, but sometimes grows to a large size, and in Pegu it is much cultivated about Phoungye houses, and in groves near towns. The wood is dark-brown, and is not, generally, deemed of value in carpentry, but Major Beddome says it is used for packing cases ; and Captain Dance says it is, in Tavoy, a large tree, used in boat-building, and forms a charcoal, which the iron-smiths there consider the best for their trade. It bears sweet smelling flowers, succeeded by a pea-shaped fruit of a yellow or of a red colour, very acrid and with an astringent juice highly recommended as a remedy in dropsical habits. The nut hangs at the end of the fruit, outside, and is about an inch long, of a kidney shape, edible and wholesome when roasted, to be found in every bazar in India, and forming an article of trade and commerce. They are used for imparting a flavour to Madeira wine. Also, ground up and mixed with cocoa, they make a good chocolate, and are said to yield a spirit by distillation, superior to rum or arrack, and described as a powerful diuretic. They also yield, by expression, an edible oil, equal if not superior to olive or almond oil. The pericarp of the nut produces a black acrid oil, called Cardole or Cashew apple oil. It is a powerful vesicating agent, and, owing to its caustic properties, is often applied to warts, corns, ulcers, &c., and to floors or wooden

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rafters of houses to prevent the attacks of white ants. It requires, however, to be used cautiously. Exposure to the vapour of the oil, when under preparation, will produce violent swelling and inflammation. An astringent gum is exuded from the trunk of the tree to the extent of 5 to 12 lbs. annually, which should be collected when the sap is rising. It makes a fair substitute for gum arabic, forms a good varnish, and is particularly useful where the depredations of insects require to be guarded against. In S. America, book-binders wash books with a solution of it, in order to keep away moths and ants. The juice which flows from an incision in the trunk of the tree imparts an indelible stain to linen. The bark of the tree is given internally in infusion, in syphilitic swellings. The fresh juice of the flower stalks is used in lemonade, and wine and vinegar are also made from it by fermentation.—*Roxb.* ii. 312, *Voigt, Mr. Jaffrey, Drs. McClelland, Mason, Useful Plants, Vegetable Kingdom, Dr. Riddell, M. E. Jur. Report, Major Beddome, Mr. W. Fergusson.*

ANACLOSA DENSIFLORA, *Bedd. M. L. S. J.*

A lofty tree of the Animullay forests, with a close-grained and strong wood.—*Beddome.*

ANCISTROLOBUS CARNEUS, *Wall.*

Hypericum carneum, *Wall., Cat.*

Soung-ga-læ. BURM.
Toung-ga-la. MARTABAN.
Zin-ga-læ. TAVOY.

This tree attains a maximum height of 30 feet, it rarely exceeds 3 feet in girth and its maximum is 3 cubits. It is plentiful in the Pegu and Toonghoo forests, where the timber grows very tall, and it is found, widely scattered, all over the Amherst, Tavoy and Mergui Provinces, but in none abundant. It is also a native of China. Its dark-brown wood, when seasoned, floats in water. It has a long fibre, tenacity, durability and sufficient lightness, and is very free from knots.

It is used by the Burmese, for building, for ploughs, and for utensils of all kinds, and is recommended for handles of chisels, hammers and tools generally.—*Captain Dance, Drs. McClelland, Mason, Voigt.*

ANCISTROLOBUS MOLLIS.

Yin-bya. BURM.

This tree is described by Dr. McClelland along with A. carneus, as plentiful in the Pegu and Tounghoo forests. The timber grows very tall, but seldom exceeds three feet in girth. Wood dark brown.—*McClelland.*

ANDGERI. *Can.*

Ind yeru. MAHR.
Yeru. MAHR.

The flower of this timber tree has not been seen, and its generic name remains undetermined, but it is supposed to be a species of Sapindus or Nephelium. It is found in the Canara and Sunda forests, above the Ghât, chiefly at Nilcoond and in the southern jungles. The wood is serviceable in house building.—*Dr. Gibson.*

ANDRACHNE TRIFOLIATA, *Roxb.*

Stylodiscus trifoliatus, *Bennett.*
Psychodendron trifoliatum, *Wall.*

Uriam. ASSAMESE.

A large tree of quick growth; found in Java, Ava, Peninsula of India, at Hurdwar, Chittagong, Nepal and Assam. Wood and bark red. Employed for masts and spars of small vessels.—*Roxb.* iii, 728, *Voigt, Cal. Cat. Ex.* 1862.

ANDROMEDA OVALIFOLIA. *Don.*

Common Andromeda. ENG.
Rattan Kat. of Kaghan.
Arur or ayar. PANJAB.
Eilan. „
Bhel. PANJAB.
Erana. „
Ayatta. „
Sarlakhtei. „

Grows at 4,000 to 7,000 along with Rhododendron in the outer Himalaya. Dr. J. L. Stewart says its wood is soft and weak and used for charcoal and fuel. Mr. Powell says that the wood is moderately hard, of a reddish brown colour, used for charcoal. Bark soft. Leaves injurious to sheep and goats.—*Dr. J. L. Stewart, Mr. Powell.*

ANGELY, OR ANGILICA, according to Edye, the Malayalam and Tamil names of a tree which grows to two and a half and three feet in diameter, and from fifty to sixty feet high. It is described by him, as used for large canoes and snake-boats, and, if kept oiled, as very durable. Also, as used for planks, for native vessels, in consequence of its being very tough, and well fitted to hold the yarns where the planks are sewed together, which is the case with all the flat-bottomed boats on the coast, where there is a surf on the beach, as at Madras, for the Massula boat; at Mangalore and Calicut, for the manchee boats, &c.; and many of the pattamahs are fastened by paddings of coir on the joints of the planks, &c. Dr. Wallich and Majors Drury and Beddome recognise Edye's Angely wood to be Artocarpus hirsuta.—*Lam. Edye, Malabar and Canara, Wall. Useful Pl., Beddome.*

ANGOPHORA LANCEOLATA, or Native Apple tree of Australasia, rises to 80 feet in height and circumference of 12 to 18 feet, umbrageous, and furnishes timber fit for wheels.—*Bennett.*

ANISOPHYLLUM ZEYLANICUM.

Welipiyanna. SINGH.

A tree of the western and northern parts of Ceylon, its timber is used for common house-building purposes.—*Mendis.*

ANTIARIS. Of this genus of trees, there are six or seven species recognized, (1) the A. toxicaria, *Lesch.*, the genuine Upas tree of Java: (2) the A. innoxia, *Bl.:* and A. macrophylla, *R. Br.:* a fourth species to which no name has been applied (ramis foliisque utrumque velutinis) is cultivated in the Kew Gardens: the A. saccidora, *Dalz.* of the Western Coast of Peninsular India is a fifth: the sixth is the A. Zeylanica, *Thwaites*, of Ceylon, which like A. saccidora, yields sacks: and the seventh is A. Bennetti, *Seeman*, the Ma-mi or Ma-vu-ni-Toga, of the Tonga Islands —all trees of great height.—*No.* 53, *Vol.* 9, *Ann. Mag. Nat. Hist.*

ANTIARIS INNOXIA, *Blume.*

Antiaris saccidora, *Leschen, Wight.*
Lepurandra saccidora, *Nimmo.*

Jagguri. CAN.	Karwat. MAHR.
Karwat. ,,	Ritti-gaha SINGH.
Sack tree. ENG.	Araya-angely. MALEAL.
Chandal. HIND.	Riti-gaha. SINGH.
Jassoond ,, of Bombay.	Netavil maram. TAM.
Juzoogree ,, of Concans and Guzerat.	Jagguri. MAHR.

A stately forest tree of Ceylon: indigenous on the West side of India, in the Animullay Hills, is very common and the most gigantic of all the trees in the Wynaad jungles and grows in the jungles near Coorg, in Travancore, Malabar, Canara and in the ravines at Kandalla. The wood is not much used, but the Cooramboor bags or sacks are made from the bark by a very simple process. A branch is cut, corresponding to the length and diameter of the sack wanted. It is soaked a little, and then beaten with clubs until the inner bark separates from the wood. This done, the sack, formed of the bark, is turned inside out and pulled down, until the wood is sawn off, with the exception of a small piece left to form the bottom of the sack, and which is carefully left untouched. These sacks are in general use among the villagers for carrying rice, and are sold for about six annas each. The Singhalese sew up one end of the bark for a sack.—*Royle, Fib. Pl., page* 343, *Mr. McIvor in M. E. J. R.*

ANTIARIS TOXICARIA, *Leschen.*

Ipo toxicaria, *Persoon.*

The Upas Tree of Java. ENG.	Anchar. JAV. MALAY.

This tree is often over 100 feet in height, wood not known. The Upas antiar poison is prepared from the juice, which flows from incisions in the bark.—*O'Shaughnessy, Voigt.*

ANTIDESMA ALEXITERIA.

Noli tali maram. TAM.

A small tree and a very handsome one, common enough in the jungle at Coimbatore. It is not common in the Bombay forests, but on that side of India affects rather the skirts of cultivated land, and there never reaches a size sufficient to render it fit for purposes of carpentry. Bark made into cables. Leaves in decoction in snake bites. Fruit delicious.—*Vegetable Kingdom, Drs. Gibson and Wight.*

ANTIDESMA BUNIAS, *Spreng.*

A. alexiterium, *Spreng.*	Stilago bunias, *Linn.*
Bunius sativus, *Rumph.*	*Roxb.* iii. 758.

Ariya poriyam. MALEAL.	Karawilla Kabella. SINGH.
Noli Tali. MALEAL.	Nolai Talai maram. TAM.

A very handsome middle-sized tree, of quick growth, growing in Ceylon, on the Coromandel and Malabar sides of the peninsula of India, in Assam and in Nepaul. It grows to rather a large size in Assam with a girth of twelve or fourteen inches, but the wood by immersion in water, becomes heavy and black as iron. In Ceylon, the wood is used for ordinary purposes. The bark is used for making ropes. Its leaves are acid and diaphoretic, are used as decoction in snake bites, and when young are boiled with pot herbs like sorrel, and employed in syphilitic cachexia.—*Roxb.* iii. 758, *Useful Plants; Vegetable Kingdom, Mr. Fergusson.*

ANTIDESMA DIANDRUM.

Stilago diandra, *Roxb.* iii. 759.

Grows on the Travancore mountains, in the Concans and Northern Circars, and is a common shrub in the sub-Himalaya. Wood white, hard, fine-grained and veined, and useful for various purposes. Sub-acid leaves made into chutnee.—*Roxb.* iii. 759, *Mr. R. Thompson, Useful Plants, Major Beddome.*

ANTIDESMA PANICULATUM, *Roxb.* iii. 770.

Antidesma pubescens, *Roxb.* iii. 770.

By-it-zin. BURM.	Jána palaseru. TEL.
Jeriam Kottam. MALEAL.	Pollari. TEL.
Jeram Kottam. ,,	Pollai. ,,

This tree grows in the Northern Circars, Animullays and Malabar, and is found in the Rangoon, Pegu, Tounghoo and Tharawaddy forests. It furnishes a small crooked timber, of a close grain, with the wood of a red colour and adapted to cabinet-making.—*Roxb.* iii. 770, *Useful Plants, Drs. Mason, and McClelland.*

APOLLONIAS ZEYLANICA, *Thwaites*, 253. This tree grows in the Central Provinces of Ceylon at 3,000 to 4,000 feet, and 50 to 60 feet high.—*Mr. Fergusson.*

APOROSA LATIFOLIA, *Thwaites.*

Mapat-Kabellal. SINGH.	Pepiliya. SINGH.

A useful timber tree of Ceylon.—*Mr. W. Fergusson.*

APOROSA LINDLEYANA, *Thw.*

Kœbella. SINGH.

A good-sized tree of the western forests of the Peninsula, most abundant in Wynaad and Coorg and a common tree in Ceylon, where its wood is used in house-building—*Beddome, Fergusson.*

AQUILARIA AGALLOCHA, *Roxb.*

Aqulugin. AR.
Ugoor or Ag'r. BENG.
Aloes wood-tree. ENG.
Black Agallocha. ,,
Eagle wood tree. ,,
Agila wood tree. ,,
Bois d' Aigle. FR.
A'g'r. HIND.
Ud-i Hindi. HIND. PERS.
Ud-i Kamari. ,,
Ud-i Samudri. HIND. PERS
Agallochum. LAT.
Kalamba. MALAY.
Gahru. ,,
Kaya gahru. ,,
Agaru. SANS.
Ag'ru ch'ka. TEL.
Ag'ru. TEL.
Krishna agaru. TEL.

This is described by Roxburgh as an immense tree, a native of mountainous tracts, E. and S. E. of Sylhet, in lat. 24° to 25° N. It is supposed to be one of the trees that furnish the Eagle wood of commerce.—*O'Shaughnessy, Voigt.* 305, *Roxb.* ii. 422, *Ainslie.*

AQUILARIA MALACCENSIS, *Lam.*

A. ovata of Botanists.

This tree has a whitish timber. It is a native of Malacca, Roxburgh regards A. ovata as a distinct species.—*Voigt.* 306, *Eng. Cyc.*

AQUILARIA SECUNDARIA.

This tree has a white and inodorous timber, but, when diseased, secretes a resinous matter said to be the true Eagle wood.

ARALIA CRASSIFOLIA,

Horocka tree of New Zealand.
Fish-bone tree of Europeans.

It grows in forests and shady situations, both on elevated lands and in valleys, and attains a height of 25 to 30 feet. The circumference at the base is about a foot. The wood is very close-grained, heavy, hard and flexible, and has been used for boat-building.—*Bennett's Gatherings,* p. 409.

ARANELLAH ? A wood collected by Colonel Frith in Travancore, where it is employed for building ordinary houses. It is of a dark brown colour with a specific gravity of 0·645. The tree is not determined. The Tamil name of Cicca disticha, is Arinelli.

ARAUCARIA CUNNINGHAMII *G. Don.*

Australian or Moreton Bay Pine.

A remarkable but tender species, forming vast forests along the shores of Moreton Bay in lat. 14° to 29° S., and on the alluvial bank of the Brisbane River, lat. 27° to 30° S. It attains from 100 to 130 feet in height, with a circumference of upwards of 14 feet, having a clear stem to 80 feet. Voigt, however, perhaps by some mistake, describes it as a shrub.—*Voigt.* 567.

ARAUCARIA EXCELSA, *R. Br.*

Dombeya excelsa. *Lamb.* | Colymbeya excelsa. *Spreng.*

The Norfolk Island Pine, grows also in New Caledonia, Botany Island, and Isle of Pines. It is a majestic tree, growing to the height of from 60 to 228 feet, with a circumference of 30 to 40 feet. Its wood is useful for carpenters' in-door work, but is too heavy for naval purposes as spars. Dr. Bennett also says that its wood is not durable except for interior work, or for ornamental work, as picture frames, work boxes. The roots and knots are turned into cups and vases, for which they are well adapted. Though Keppell says that this tree is not so lofty as the Altingia excelsa, but is of the same quality and is used for the same purposes, the two trees are supposed to be identical.—*Voigt,* 557, *Keppel Ind. Arch., Vol. II,* p. 282, *Bennett.*

ARCHIPELAGO OF EASTERN ASIA. Extensive collections of woods from Borneo, New Guinea, and several other of the Archipelago islands, were contributed to the Exhibition of 1851, including sandal wood from Timor, and Lingoa or Amboyna wood, from Ceram, in the Moluccas. See Borneo, Japan, Java, Labuan.

ARECA, of this genus of palms, the A. catechu, the A. Dicksonii, A. oleracea and A. vestiaria only need be mentioned, but the A. globulifera, *Lam.,* grows in the Eastern Islands and Ceylon, and the A. horrida (Caryota horrida) grows in Ceylon.

ARECA CATECHU, *Linn.*

A. Faufel, *Gærtn.*

Fufil. AR. ?
Banda. BALI.
Gua. BENG.
Bonga. BISAYA.
Rapo. BUGIS.
Kunthi? BURM.
Kwun-ben. ,,
Supeari. DUK.
Areca Palm. ENG.
Betel-nut Palm. ,,
Catechu Palm. ,,
Supari. HIND.
Jombi. JAV.
Pinang. MALAY.
Kachu. ,,
Adaka. MALEAL.
Caungœ. ,,
Cavughu. ,,
Guvaka. SANS.
Puwak. SINGH.
Bonga. TAG.
Paku maram. TAM.
Kamuga? ,,
Poka chettu. TEL.
Oka. ,,
Vakha. ,,
Kunda-poka. ,,
Kola-poka. ,,
The variety Kola-poka has long nuts.

This graceful palm grows in all tropical Asia and its islands, and often attains a height of 50 or 80 feet. The trunk is only a few inches in diameter but is used in Ceylon for pins and pingo sticks or shoulder yokes and for temporary buildings—in Travancore for spear handles and bows, and Dr. Cleghorn says for small objects in turnery. The nuts are chewed as a luxury, and are also used in turnery for small ornamental work.—*Roxb.* iii. 615, *Voigt, Mendis, Dr. Cleghorn, Useful Plants, M. E. Juries' Reports, Ell., Fergusson.*

ARECA DICKSONII. *Roxb.*

Seaforthia Dicksonii. MART. | Lænætari Puwak. SINGH.

Grows in Ceylon, is found in great abundance, on the mountains of Travancore and Malabar. Fruit used as betel. Wood unknown, *Roxb*. iii. 616.—*Useful Plants, Voigt.*

ARECA OLERACEA, *Linn.*

Oreodoxa oleracea, *Endl.* | Euterpe caribæa, *Spreng.*

Cabbage Palm. ENG.

A native of the West Indies, wood used similarly to that of Areca catechu.

ARECA VESTIARIA, is so called from clothing being made of its fibres.

ARENGA SACCHARIFERA, *Labill.*

Borassus gomutus, *Lour.* | Saguerus Rumphii, *Roxb.*

The Tree.

Nawa. AMB.
Nama. ,,
Aren. JAV.
Monchons. MACASS.
Anao. MALAY.
Anowe. ,,
Akel. PORT.
Mandar. ,,
Sagwan. SP.
Sagwire. ,,
Seho. TER.

The Sap.

La-gen. JAP.
Barum or Baru?

The Gossamer.

Karvel. JAV.
Kawal. ,,

The Hair.

Makse. AMB.
Duk or Dok. JAV.
Iju, Ejoo or Eju. JAV.
Gomuti. ,,

A handsome tree of the Indian Archipelago, which attains a height of 30 or 40 feet. It is is one of five species of the genus "*Arenga*" which chiefly inhabit the islands of the Indian Archipelago, although they also grow on the continent of Asia. They are, all of them, handsome trees, their favorite localities being dense shady forests and in the neighbourhood of rivers and rivulets; it comes into bearing about the seventh year, and continues to flower from 2 to 5 years. Dr. Roxburgh, introduced it largely into India, where the natives, it is said, took kindly to it, but they seem to have lost the knowledge of its uses. Its commercial products are its wine, the "Barum" or "Baru," and its Eju or Gomuti. The Gomuti is the only one of this genus of any commercial importance. A horse-hair like substance (Javanese, *Duk*. Malay, Iju or Eju or Gomuti, the last of which) has given the name to the tree. Its leaves, when very young, are eaten like the American Cabbage palm, Oreodoxa oleracea, *Endl.* The fleshy outer covering of the fruit of the Gomuti when macerated, affords a fiery liquor, appropriately denominated "hell-water," by the Dutch, and the seed, or rather the albumen when freed from its noxious covering, is made into a sweetmeat by the Chinese. It yields Sago, Palm wine, Gomuti Sugar and the Baru. *Roxb*. iii, 626, *Crawfurd's Dictionary Archipelago: Seeman on Palms, Dr. Royle's Fibrous Plants, Voigt.*

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ARMENIACA VULGARIS.

Jaldárú (Corrupted from the Persian "Zardárú," *i. e.*, yellow peach.)

Chiu. PAN.
Barzha, Kanáwar,
Apricot, ENG.
Hárí, Hazára.
Zard Alu. PERS.
Chir of Chamba.
Cher of Chenáb.
Sári.
Jard-áru. PUSHT.

It is called "Chir" when wild, and "Sárí" when grafted, so as to bear fruit. Wood hard but rarely met with sound. It is used for doors in Chamba, and for making boards of books in Ladákh, which are often carved. Much esteemed in France for turning. The kernels yield an excellent oil. It flourishes at an elevation of from 7,000 to 13,000 feet. Cunningham, (J. D.) says it does not ripen above Shalkar.—*Mr. Powell, Hand Book.*

ARMOSIA DASYCARPA.

Thit-wa-jee. BURM.

This is found here and there widely scattered in the Swar and other Forests north of Tounghoo, and in Pegu. Wood, red; equivalent to mahogany.—*McClelland.*

ARREMENE, SINGH. A timber tree which grows in the central province of Ceylon. It weighs 57 lbs. per cubic foot, and lasts to 50 years. It is employed there, for furniture and house building. It is said to be the Cassia Sumatrana.

ARRAKAN.—The following are a few woods of Arrakan:—

Bhaman.
Inwroot.
Iswanhyee.
Khyandevel teing.
Moo-tso-ma.
Parawa.
Pyawa tulli.
Pyanany.
Pyaing.
Therock.
Thekuddo.
Thorat-soing.
Thenganet.

See Akyab. BURMAH.

ARTOCARPUS, *Species.*

Myauk Sook. BURM.

A tree of Akyab, used in house-building. It grows to a large size, is very plentiful in the province, and the fruit is edible.—*Cal. Cat. Ex.* 1862.

ARTOCARPUS, *Species.*

Patta del. SINGH.

Grows in the Southern provinces of Ceylon, and is there used for boats and buildings; a cubic foot of the wood weighs 34 lbs. and it is said to last 30 years. The fruit—9 by 2½ inches—is boiled and eaten as food.—*Mendis.*

ARTOCARPUS, *Species.*

Toun-pein-nai. BURM.

Wood yellow, a cubic foot weighs lbs. 39. In a full-grown tree on good soil the average length of the trunk to the first branch is 80 feet, and average girth measured at 6 feet from the ground is 12 feet—*Dr. Brandis.*

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ARTOCARPUS, *Species.*

Thoun-ben. Burm.

Dr. Wallich tells us that this species of the genus grows in Tavoy, and is a large tree, used in boat–building. Perhaps identical with the last.

ARTOCARPUS, *Species.*

Py-na-the. Burm.
Tanna-Ben. Burm.

Dr. Wallich describes this as growing in Tavoy but wood not used.

ARTOCARPUS, *Species.* Trap tree, of Singapore, furnishes the gutta used as bird-lime ; and the fibres of its bark are used there for fishing lines, cordage and nets.—*Royle. Fib. Pl.*

ARTOCARPUS, *Species.* Small bread-fruit. This species is not scarce in the Tenasserim forests. It yields an orange-coloured fruit resembling in taste a custard apple, and in appearance a fig.—*Dr. Mason.*

ARTOCARPUS CHAPLASHA, *Roxb.*

Lesser Jack. Eng.
Thorny Jack. ,,
Chaplasha. Hind.
Chaplash. ,,

This large, straight, often immense tree, grows in Bengal, Assam, Tipperah, and Chittagong, and in some places attains an immense size yielding a valuable timber, from which the canoes of the Fennee and Goomtee rivers are made. The wood is applied for other uses, and is said by Roxburgh to be particularly valuable for work which has to be immersed in water.—*Eng. Cyclopædia, Useful Plants, Voigt.* 290, *Roxb.* iii. 525.

ARTOCARPUS ECHINATA, *Roxb.*

Toung Ben. Burm.
,, peing-nai. Burm.
Ka-nœ Kya-tha. ,, ?
Mountain Jack. Eng.
Tampooni. Malay.
Tam-pooin. Malay.

This is a large tree with its leaves gashed like some species of oak. It is found in Ceylon, in Burmah, and, though not abundant, all over the Tenasserim and Martaban Provinces, in Amherst, Tavoy, Penang, and the Mergui Archipelago,—a large expanse of country. Its maximum girth is 5 cubits, and maximum length 30 feet. The wood is not known to be used in Ceylon, but, in Burmah, according to Dr. Mason, it is deemed a valuable timber by the natives, especially for canoes. Captain Dance, however, tells us that though it floats in water when seasoned, the seasoned wood is too light and spongy, for durability, and should be regarded as a useless wood. Whether these conflicting opinions be the consequence of examining trees which have grown in different localities, subsequent inquiries must determine, but the wood possibly improves by immersion in water. It is said to produce an agreeably acid fruit, and Dr. Mason mentions Dr. Wallich as saying that " it produces a sort of caoutchouc, with which the Burmese pay their boats." But he imagines this to be a mistake, as the Burmese almost universally pay their boats with a substance that is produced by a bee, mixed sometimes with dammer.—*Roxb.* iii. 527, *Dr. Mason, Mr. McIvor, Voigt.*

ARTOCARPUS HIRSUTA, *Lam.*

Artocarpus pubescens, *Willd.*

Helbulsoo. Can.
Hairy Bread-fruit tree. Eng.
Wild Bread-fruit tree. ,,
Pat Fannas. Mahr.
Hebolsu. Mahr.
Ran-Fannas. Mahr.
Aini maram. Maleal.
Ansjeni. Maleal.
Del. Singh.
Aladel. ,,
Anjili maram. Tam.

This large handsome tree, well adapted for affording shade, is not found in the northern jungles of the Bombay presidency : sparingly in those south of the Savitri to the bounds of Sawantwarri, after which it becomes more plentiful and continues abundant all down the Western Coast of the Peninsula. Dr. Gibson says that it grows in Canara and Sunda, above, and in the ravines of the ghats, but mostly in the Honore and Bilgy talooks, and is deemed valuable for canoes and for planks. Dr. Birdwood says it grows in the Punt Suchews country. It is scarcely entitled to a place in the list of Coimbatore woods, being a native of the coast, and not extending so far inland. It is indigenous in Burmah. It abounds in the forest of Malabar, whence, Mr. F. N. Maltby, in 1860, believed that ten thousand loads per annum, of this wood, for five years, could be supplied at the rate of twelve to fourteen rupees per candy. It grows on the Western, Southern and Eastern sides of Ceylon, and its timber, which is there used for fishing-boats and in house-building, weighs 40 to 51 lbs. the cubic foot, and is calculated to last from 25 to 70 years. The fruit (9 in. by 3 in.) is there boiled and eaten as food by the natives. It yields the Anjely wood of commerce, a wood esteemed particularly useful as a timber which bears exposure under water. The wood is valuable for canoes, ships' framework, and in house-building, for which purposes it is largely used on the Western side of the peninsula of India, in Malabar and Canara, and is sought after for H. M.'s Dockyards. Its bark is occasionally used in Canara in the preparation of a brown dye.

The fruit is the size of a large orange, and abounds in a viscid juice which flows freely from the rough rind if touched. This is manufactured into bird-lime. The pulpy substance which surrounds the seeds is much relished by the natives, being almost as good as the fruit of the Jack.—*Roxb.* iii. 521, *Dr. Wight, Madras Exhibition Juries' Reports, Drs. Gibson, Mason, Mr. Jaffrey, Voigt, Useful Plants, Dr. Cleghorn in Conservator's Reports, Mr. Mendis.*

CSL

ARTOCARPUS INCISA, *Linn. fil.*

Redemachia incisa, *Thunb*
Soccus granosus, *Rumph.*
Soccus lanosus, granosus, syloestris, *Rumph.*

Maiore. TAHITI.
Bread fruit tree. ENG.
Rata-del. SINGH.
Nang-ka. MALAY.

This tree is a native of the South Sea Islands, and has been introduced into various parts of South Eastern Asia—into Ceylon, in some parts of the Madras territories, where it is occasionally seen in gardens, in parts of the Bombay Presidency, in some parts of the Dekhan, is cultivated in a few gardens in Tavoy and Moulmein, and is extensively cultivated throughout the Malay Archipelago. In Tahiti, the general name of the Bread-fruit tree is Maiore, but there are 24 varieties, each of which has a name. It is a tree of slow growth, but it attains a tolerable large size in Bombay, where however it seldom ripens, the fruit which is muricated, falling off in the cold season. In the Dekhan, its fruit is the size of a large orange, or small pumplemose with a muricated rind. The Dekhan fruit is of that variety which is full of seeds and is of no value. It bears well at Tavoy and Moulmein. The fruit of the useful variety, cut into slices and fried, has something of the flavour of the sweet potato, similarly dressed. Like the Jack, Artocarpus integrifolia, it bears fruit on the branches, the trunk and the root. It will grow from cuttings, and requires a light soil, with care, and watering at first. The bark stripped, and then beaten and prepared, makes a kind of cloth with which the South Sea Islanders clothe themselves. At Tahiti, clothing made of it, and worn chiefly by the common people, was, at one time, more common than that made from the paper mulberry, though inferior to it in softness and whiteness, *Roxb.* iii, 527, *Royle. p.* 34, *Crawfurd's Dictionary, Drs. Riddell, Mason, M. E. Jury Reports, p.* 24, *Voigt.* 290.

ARTOCARPUS INCISA. *Variety*, communis, *of Forst.*

Soccus lanosus, *Rumph.*
Seedless Bread-Fruit.

This variety of the Bread-fruit tree attains a height of 30 to 40 feet, with a stem of a foot or a foot and a half of diameter. Of the two varieties one contains seeds and one without them, but both have been introduced into some parts of India, several years since into Penang and Ceylon, and more recently into Mergui and the Tenasserim provinces from the South Sea Islands, of which it is a native. It is this seedless variety, that has given the name to the tree, and in some islands of the Pacific is much used. The fruit which has an unpleasant smell is scarcely yet known in Peninsular India. It is often larger than a man's head, and weighs sometimes as much as fifty pounds, is round, greenish, and covered with prominent papillæ, enclosing a white fibrous pulp, which becomes yellow and succulent at maturity. The pulp contains much starch, and in Polynesia, is used as food. The natives of these islands, before eating the unripe fruit cut it into quarters and roast it in the ashes. The ripe fruit requires no preparation. The bark furnishes a fibrous tissue, of which the people of Tahiti make a large part of their clothing.—*Roxb.* iii. 527, *Dr. Mason, Voigt.*

ARTOCARPUS INTEGRIFOLIA, *Linn.*

A. heterophylla, *Lam.*
Redemachia integra, *Thunb.*
Polyphema Jaca, *Lour.*
Sitodium cauliflorum, *Gært.*

Kantal. BENG.
Peing-nai. BURM.
Pani Nai. BURM.?
Alase gana mara. CAN.
Jack Tree. ENG.
Indian Jack Tree. ENG.
Entire-leaved Bread-fruit. ENG.
Pannas. HIND.
Barral. ,,
Fannas. MAHR.
Sukun. MALAY.
Kluwi. ,,
Tambul. ,,
Pilavuh. MALEAL.
Dahu of Panjab.
Ti-u of Hazara.
Kos-gaha. SINGH.
Pila maram. TAM.
Panasa chettu. TEL.
Véru panasa. ,,

This valuable fruit and timber tree is found all over India, more or less abundantly, growing rapidly to about 2½ feet in diameter. In the Bombay Presidency, it is met with commonly about villages, rare in the North Konkan, but most common south of the Savitri creek. It is, there, always planted and often carefully manured, and when so treated it attains a great size. Dr. Stewart and Mr. Powell mention it in the Panjab. It grows in the South Eastern and Western Provinces of Ceylon, and its timber, which weighs 42 lbs. to the cubic foot, and is esteemed to last from 25 to 80 years, is in general use for building boats and for all kinds of furniture. Colonel Frith mentions that in Travancore, this wood is of 0·554 sp. gr. and measures 2 to 4 feet in circumference. Dr. Gibson has seen pillars of it, in the interior of the buildings of the old forts at Severndroog, having four feet on each side. It occurs in Burmah, and is a tree of Moulmein where its yellow wood is used to dye the yellow cloths that the phoongyes or Burmese priests wear. It is there a large tree and affords a very dark grateful shade, and when the fruit, which is often larger than a man's head, is hanging all around its branches, it is a grand object. Malcolm says it is a very common tree in South Eastern Asia, but not thought to be indigenous, attaining a height of 80 to 100 feet, with thick alternate and spreading branches, and very dark-green leaves. It yields an excellent and valuable timber, yellow when first cut, but afterwards changing to various shades of brown, a dull red or mahogany colour. When made into tables and

• wel[illegible]pt, it attains a polish little inferior to mahogany in colour and appearance. It is used for musical instruments and ornamental work. It is suitable for house-carpentry in general, but it is a very brittle wood when dry and does not bear great alternations of dryness and moisture. It is well known in England as the Jack fruit tree wood, where it is used for cabinet and marquetry work, likewise for the backs of brushes. It affords an excellent fancy wood for tables, chairs, frames, &c., and the roots of the older trees furnish a dark coloured wood admirably adapted for picture frames and carving work of all kinds. The wood is also valued for grain measures. Mr. Mason says that the yellow wood of the jack affords beautiful timber for furniture, and in some parts of India it is highly valued, but this does not seem applicable to the present day, but Mr. Faulkner, also, tells us that Jackwood is imported into Bombay from the Malabar Coast, and was at one time in great request for making furniture. Of late years, however, it has been entirely superseded by blackwood for this purpose. It is imported into Britain in logs from 3 to 5 feet in diameter, and also in planks ; the grain is coarse and crooked, and often contains sand. The Jackwood is sometimes named Orange-wood from its colour and also Jak-wood, Jack-wood and Kanthul. In the south and west of Ceylon, where the trees are of rapid growth and very fruitful, it is in general use for building : beams, rafters, doors, and furniture, are all made of it, and it is perhaps the most valuable and the most extensively used for furniture and all useful purposes of any timber grown in that island. It is not a common timber in the Circars, though some good trees are occasionally procurable from the hill zemindaries, resembling mahogany in colour and appearance. The full grown fruit weighs from 30 to 60 lbs., growing direct from the branches and the trunk, to which it hangs by a peduncle, and in aged trees, grows from the roots, where they are detected by the crackling of the soil. These last are said to be most prized. The fruit is covered with a very thick, rough green skin, has an unpleasant odour, and is full of white kernels, the size of a pullet's egg, the fleshy parts around which are eaten both green and ripe. It is sweetish but is not prized by Europeans, who, at most, have only tasted it, Natives of India, however, highly prize the fruit, and to the natives of Burmah, where it is more abundant than any other fruit, except the plantain, it is invaluable. It is said to be very indigestible. The kernels of the ripe fruit, boiled or toasted, resemble the Spanish chesnuts in flavour, and are prized by the natives. The green fruit, after removing the outer rind, is used in curries, and when ripe, the pulp and seeds are used similarly. As with all cultivated fruits, there are many varieties of the Jack. A bird-lime is manufactured from the juice. In Travancore, the entire fruit is planted, and when the various seeds germinate and grow up, the shoots are tied together with straw, and they unite into one stem, which bears fruit in about 6 or 7 years.—*Roxb.* iii. 522, *Mr. Mendis, Drs. Wight, Cleghorn in M. E. J. Rep., Useful Plants, Crawfurd's Dictionary, Drs. Gibson, Mason, McClelland, Vegetable Kingdom, Voigt, Faulkner, Holtzapfel, Baker's Papers, Mr. Powell, Dr. J. L. Stewart, Mr. Fergusson.*

ARTOCARPUS LAKOOCHA, *Roxb.* ; iii. 524. *W. Ic.*

Dephal. BENG.
Dea-phul ,,
Burhul ,,
Pain-nai ? BURM.
My-ouk-loke. ,,
My-ouk-louk. ,,
Lacoocha Bread-fruit. ENG
Small Jack. ENG.
Kamma-regu. TEL.
Laku-chamma. ,,
Nakka-renu. ,,

This tree grows in S. Canara and Malabar, is occasionally grown in gardens or near houses, in Bengal, as a large shady tree, is found sparingly in Kumaon, grows in Burmah and the Tenasserim Provinces, where it is usually called a kind of fig. Dr. Royle thinks it may be found to yield fibres. Its roots are used in dyeing yellow. Dr. Brandis tells us the wood is used for canoes. A cubic foot weighs 40 lbs. In a full-grown tree on good soil the average length of the trunk to the first branch is 30 feet, and average girth measured at 6 feet from the ground is 6 feet. The whole tree and unripe fruit contain much tenacious milky juice. The fruit is prized by the Burmese, and is eaten in Bengal. The male spadix is acid and astringent, and eaten by the natives in their curries.—*Roxb.* iii. 524, *Voigt, Drs. Royle, McClelland, Mason, Wight, Brandis, Useful Plants, Fl. or And. Mr. R. Thompson.*

ARTOCARPUS MOLLIS, *Wall.*

Tounbein. BURM.

An immense tree in British Burmah, wood used for canoes and cart wheels. On the hills, large trees rather scarce. A cubic foot weighs 30 lbs. In a full-grown tree on good soil the average length of the trunk to the first branch is 80 feet, and average girth measured at 6 feet from the ground is 12 feet. —*Dr. Brandis.*

ARTOCARPUS NOBILIS, *Thw.* 262.

A. pubescens, Moon's Cat, p. 61, not Willd.

Del-gaha, SINGH.

A gigantic tree common in the Western, Southern and Central Provinces of Ceylon up to 2,000 feet. Mr. Fergusson has often seen

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trees of it having a diameter of 3 to 4 feet. Its timber is in great request for backs and shelves of almirahs, for common almirahs, fishing boats hollowed out of single trees, &c. He has seen old specimens of this wood mistaken for that of *Nœdum.— Mr. Fergusson.*

ARTOCARPUS POLYPHEME,

A. Champadah of Botanists.

A tree of the same natural family with the jack and bread-fruit; fruit smaller than the first, but of more delicate flavour, is greatly esteemed by the Malays. It seems to be an indigenous plant of the Archipelago, and even there to be limited to the Western parts of it, such as Sumatra, the Malay Peninsula, and their adjacent islands.—*Crawfurd's Dictionary, page* 93.

ARTOCARPUS SYLVESTRIS.—*Gibson.*

Ran fannas. MAHR.

Character of wood not known.

ARUNDINARIA FALCATA.

Garu. PANJ.

Grows in the Panjab. It is the smallest bamboo, and the one which grows at the greatest heights.—*Powell.*

ARUNDINARIA UTILIS.

Nigali. PANJ.
Hill-bamboo. ENG.
Ringal. PANJ.
Spyúg Kanáwar.

Grows in the Panjab. Used for wicker work, shepherd's pipes, mats, &c.—*Powell.*

ASH WOOD. A tree of Mehra Forest, near Abbottabad, Hazara. It is a species of Fraxinus, different from that common in England.—*Cal. Cat. Ex.* 1862. See *Fraxinus.*

ASSAM. The woods sent from Assam to the Exhibition of 1862, were as follows:—

Acacia *sp.* Koroi. ASSAM.
,, Haulluk ,,
,, Mota kuli ,,
,, Jarool. ,,
,, Soom. ,,
Andrachne trifoliata.
Artocarpus, *species.*
,, integrifolius.
Bandar.
Bon soom.
Bowlah.
Cedrela toona.
Chickrassia tabularis.
Dackuree.
Dalbergia.
Dhoomkoorah.
Dingari.
,, red.
Doodkooru.
Ehretia serrata.
Gmelina arborea.
Gohora.
Goondoree.
Holow.
Jam.
Kajorkulla.
Kanda.
Kotamaya.
Khoira.
Kohir.
Koida.
Kotorah.
Lagerstrœmia reginæ.
Laurus sassafras.
Lookhoori.
Mageli.
Mangifera Indica.
Mesua ferrea.
Michelia champaca.
Modhoorullum.
Moani shalee.
Neem.
Nopahi.
Nota rohi.
Nauclea cadamba.
Parli.
Patee hoondie.
Pegai.
Peni? Wohi.
Quercus.
Salix tetrasperma.
Shaldoona.
Sham.
Sheedha.
Soleeanna.
Syzygium jambolanum.
Terminalia citrina.
,, 2 *spec.*
Tetachopa.
Wohi.

ASSAN. A tree of Cuttack. Wood light-brown coloured and strong, which sells at 6 annas per cubic foot. Plentiful in the Sonthal jungles from Raneebahal to Hasdiha. The wood is used by the natives for beams, planks and building purposes generally. One of the silk-worms from which Tussa cloth is made, feeds upon this tree. Several timber trees are procurable in abundance in the forests of the Sumbulpore district, and on the banks of the Mahanuddy, Brahminy, and Bytury rivers, and it is believed that their uses might be very much extended were a demand to spring up, and some experiments be made to test their properties and value.—*Cal. Engineer's Journal, July* 1860.

ATALANTIA MONOPHYLLA, *D. C.*; *W. & A.*

Limonia monophylla, *Roxb. Rheede.*
Limonia pumila, *Burm.*
Turræa virens, *Koen.*
Trichilia spinosa, *Willd.*

Wild-lime. ENG.
Makhur limbo. MAHR.
Malvaregam. MALEAL.
Mal-naregam ?"
Kat-elle-micha maram. TAM.
Adivi nimma. TEL.
Konda nimma. ,,

This small-sized tree is found on the Malabar and Coromandel Coasts, and is one of the most common trees in the greenwood jungles or "raaes" about the ghats of the Bombay Presidency. It is less common below and inland. Its hard heavy wood is white or pale yellow, and is very fine or close-grained; but is not procurable in pieces which would square more than four inches, but for this, it would be suitable for cabinet purposes.—*Roxb.* ii. 378, *Drs. Wight, Gibson quoted in Cyclop. of India, Voigt.*

ATTALI, the Tamil name of a tree in Ceylon which is of little value. It grows to about ten or twelve inches in diameter, and eighteen feet long. It produces a flower, and then a seed-pod, which is used as a medicine —*Edye, Ceylon.*

ATTI, Hatey or Arti, are given by Edye as the Tamil names of a Ceylon tree which grows from two to three feet in diameter, and from twelve to twenty feet high. It is used for general purposes in small country vessels. He states that it produces the wild fig.—*Edye, Ceylon.*

ATTOO VUNJEE. An amber-coloured. Travancore wood, specific gravity 0·480, Very cheap; used for firewood.—*Col. Frith.*

AUMLAH. HIND. ? A whitish coloured wood, not strong, plentiful in the Santhal jungles from Raneebahal to Hasdiha or about forty miles. Planks from this wood are used by the natives in making boxes. The fruit when dried is used by them for washing and also eaten as a kind of preserve.—*Calc. Engineer's Journal,* 1860.

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A[illegible]BA DOKA. HIND.? A tree of Chota Nagpore, with a soft, white timber.—*Cal. Cat. Ex.* 1862.

AURANTIACEÆ, the Citraceæ of Lindley, are the Citron Worts, or the Orange Tribe; the Orange, Lemon, Lime, Shaddock, Pompelmoose, Forbidden Fruit and Citron being the produce of this order. The Wampee, a fruit highly esteemed in China and the Indian Archipelago, is produced by Cookia punctata. The fruit of Glycosmis citrifolia is delicious; and that of Triphasia very agreeable. The Ægle marmelos is used in medicine and a perfume is made from its rind. The woods of the plants of this order are hard, but generally small. The flowers are remarkable for their fragrance and beauty.—*Eng. Cyc.* See *Ægle, Bergera, Citrus, Murraya, Feronia.*

AUSTRALASIA produces the timber of the following trees:—

Acacia, *species.*
,, decurrens.
,, melanoxylon.
,, pendola.
Angophora lanceolata.
Banksia integrifolia.
,, paludosa.
Calophyllum inophyllum.
Casuarina equisitifolia.
Corypha Australis.
Eucalyptus, *species.*
,, gomphocephala.
,, marginata.
,, piperita.
Hibiscus heterophyllus.
Rulingia pannosa.

—*Bennett's Gatherings.*

AVERRHOA BILIMBI, *Willde.*

Blinbingan teres, *Rumph.*

Bilimbi. BENG. ENG.
Cucumber tree. ENG.
Kama-ranga. HIND.
Wilampi. MALEAL.
Blimbing basi. MALAY.
Blimbing bas. ,,

A pretty little tree, about 8 feet high, with timber of doubtful value, growing generally in gardens in South Eastern Asia, and producing a beautiful green, smooth, fleshy fruit, about the size of a small cucumber. In Burmah it bears profusely. The unripe fruit is intensely acid and cannot be eaten raw, but the acidity becomes less as it ripens. Amongst the Malays it is used like the citron, the gooseberry, the cucumber and the caper in Europe, but can be candied or made into pickles or preserves, or preserved in sugar. Its acid juice is useful in removing iron mould. —*Roxb.* ii. 451, *Dr. Mason, Mr. Jaffrey, Useful Plants, Vegetable Kingdom, Voigt.*

AVERRHOA CARAMBOLA, *Linn.*; *Willde.*

Kama-ranga. BENG.
Zoung yah. BURM.
Mitha kamaranga. DUK.
Coromandel Gooseberry Tree. ENG.
Kam-ruk. HIND.
Karmal. HIND.
Blim-bing-manis. MALAY.
Tamara-tonga. MALEAL.
Carambola. PORT.
Tamartam maram. TAM.
Tamarta Chettu. TEL.
Koro-monga. TEL.?

a. Sweet variety, *dulcis*, mitha kamaranga.
b. Acid variety, *acida*, kamaranga.

This beautiful, but small, tree, about 14 feet high, with a spreading head, is supposed to be a native of the Moluccas, from which it has been introduced into Ceylon, India and Burmah, where it is now quite naturalised, but is only found near towns, and in gardens. The tree is said to grow, but, to be scarce, in Ganjam and Gumsur. It there attains an extreme height of 36 feet, a circumference of 3½ feet and a height of 9 feet from the ground to the intersection of the nearest branch, but no use is made of its dark-brown wood, the quality of which is not known. It bears, and in some places profusely, from three to fifty years and three times a year, a fruit about the size of a hen's egg, with five acute angles and a yellowish, thin, smooth rind. There are two varieties, a sweet and an acid. The latter contain an acid, watery pulp; they are candied and made into pickles or tarts. They make an agreeable dish when cut in pieces and cooked with sugar and wine or with skimmed milk. In Burmah the fruit is highly prized as a wholesome dish, and is used like other green fruits, in curries. The juice of the acid variety is useful in removing iron moulds from linen.—*Roxb.* ii. 450, *Drs. Mason, McClelland, Vegetable Kingdom, Useful Plants, Elliot, Voigt.*

AVICENNIA TOMENTOSA, *Linn.*; *Roxb.*, *W. Ic.*

A. resinifera, *Forst.*
A. oepata, *Buch.*, *Herb.*
A. Africana, *Palisot.*
Sceura marina, *Forst.*
Mangium album, *Rumph*

Bina. BENG.
White Mangrove. ENG.
Oepata. MALEAL.
Nalla mada. TEL.
Mada chettu. ,,

A small tree or ramous shrub, grows within the tropics all over the world, and the wood serves the natives for various economical purposes. It has small dingy yellow flowers. Its wood-ashes are used in washing and cleaning cotton cloths, and painters mix them with their colours. The kernels are bitter but edible. The green fruit is used in medicine externally. In Rio Janeiro its bark is used for tanning.—*Roxb.* iii. 88, *Flor. Andh.*, *Useful Plants, Voigt.*

AZADIRACHTA INDICA, *Ad. Juss.*; *W. & A.*

Melia azadirachta, *Linn.*, *Roxb.*, *Rheede.*

Nim. BENG.
Thembau-ka-ma-kah. BURM.
Margosa tree. ENG.
Bead ,, ,,
Ash-leaved tree ,,
Nim. HIND. MAHR.
Weppa. MALEAL.
Aria Bepou. MALEAL.
Nimba. SANS.
Vepam maram. TAM.
Vepa. TEL.
Nimba. ,,
Yepa chettu. ,,
Nimbamu. ,,

This beautiful tree is found throughout Ceylon, India and Burmah, and in some localities attains a large size. It is to be seen everywhere, though more seldom as a forest tree than in waste places and in the villages of the people and gardens of Europeans, where it is grown for ornament and shade. In the south of India, it is in considerable abundance

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in most parts of the inland country, and in the Pegu province, is plentiful in the Prome district only. It is grown sparingly in Kumaon and attains a growth of 6 to 9 feet, is common, planted, in the east of the Panjab, but is unknown west of the Indus.

The quality of its timber varies in these localities. Throughout the peninsula of India, it yields a compact, hard, heavy, durable wood, when old—difficult to work, but beautifully mottled and deserving attention for ornamental purposes. It is well fitted for ship-building and carts. Some samples exhibited by Mr. Rohde at the Madras Exhibition, equalled the best fancy woods, and some of the finest furniture he had seen, was from an old margosa tree. He gave a beautiful plank of a light reddish brown colour, to the Madras Museum. It is used in Coimbatore for cart-wheels, and, in bare districts of the Bombay Presidency, it is of great importance for building and agricultural purposes. In the Prome district of Pegu, it is described as a large but soft timber only fit for flooring. This is one of the trees which it would be of importance to increase throughout the country. It reaches a large size even in stony ground. It comes into full foliage in the very midst of the hot weather. Every part of the tree is bitter, and its leaves, bark, seeds and the oil from its seeds are largely used in native medicine. It is venerated by the hindu people, who, regarding the small pox as a goddess, employ the leaves in that disease, and, like the shrew ash tree, in England, it is often resorted to by the friends of the insane, who pass the sick person through a cleft of the tree, or through a stem which, having parted and reunited, forms a circular opening—*Roxb.* ii. 394, *Dr. Wight, Mr. Rohde, Drs. Cornish, Gibson, Cyclop. of India and Supplement, Elliot, Voigt., Dr. J. L. Stewart, Mr. R. Thompson.*

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BABOOL. A Hindi vernacular word, applied as a generic term to some species of Acacia; but, the Babul, proper, is the A. Arabica (which see). In Sind, the Babool proper is very abundant and grows to a very large size. It is exceedingly hard and weighty. For agricultural implements and all native purposes, it is excellent. It was also much used by the Indus Flotilla, for paddle flats, rudders, stanchions and boats' knees—in fact for every purpose to which wood can be applied. Its bark is employed in tanning, its pods form a valuable food for cattle, its young branches are the favorite food of camels and goats, its bark yields gum and lac, and for all these articles, wood, bark, pods and lac, a sale is always found. Drs. Gibson and Cleghorn have strongly advocated the extension of this most useful tree by plantations. Dr. Cleghorn (Report, p. 7) suggested that it should be conserved along the banks of the Tumbudra, both in the Bellary district, and in the Nuggur division of Mysore. The Babool springs up in the alluvial soil on both banks of that river (in similar ground to the shikargahs of Sind). Dr. Gibson, continuously, for years, since 1846, strove to form such preserves. He says (Report of 1857-60, p. 14) the several proposed Babul reserves in this eastern line should be kept in view, otherwise the want of tree reserves in a bare country may hereafter be felt. He tells us (pages 18 and 19) of Babool preserves on the Bheema and Moola-Moola rivers, and adds that, the net profit of all these Babool preserves for one year, after deducting every expense, including Rs. 432 per annum for keepers, reached the figure of Rs. 1,068-9-8, being the best return till then had since the commencement of conservative measures in 1846. He mentioned that the supply of wood from the Babool preserves on the Bheema river, in the Ahmednuggur Collectorate, continued to increase, not only as regards firewood, but also in respect to large wood for the Gun Carriage Manufactory, and, to meet the increasing demand, every opportunity had been taken for extending the preserves. He informs us that the large Babool wood which used to be obtained from Kutch and Kattywar seems now to be not procurable, but adds that the road-side Babools, especially in the Sattarah Districts, will soon afford a large supply of Gun Carriage timber.—*Drs. Gibson and Cleghorn.*

BAH-MAH-THO-A, Burm. A useful timber of Tavoy.

BAIB-GA? A tree of Akyab, plentiful in the Sandoway district. Used for firewood.—*Cal. Cat. Ex.* 1862.

BAIRIYE, Singh. A tree of the northern and western provinces of Ceylon, found near the mouths of rivers. A cubic foot weighs 57 lbs., the wood is used for anchors and in house-building. It is said to last from 10 to 30 years.—*Mr. Mendis.*

BALANOPHORA INDICA, *Wall.* 293. Grows in the Peninsula of India, in the forests of the Central Province of Ceylon, at 3,000 to 4,000 feet. It is an inconspicuous, leafless, fungous-like plant, with conglomerate masses of flowers, growing parasitic on the roots of other plants, and a good deal like the flowers of "Petasites vulgaris," when they first rise out of the ground. Mr. Fergusson found it on the tops of the mountains above Naranghеena in Hewahette. This species produces the great knots on the maple roots, from which the Tibetans form the cups mentioned by M.M. Huc and Gabet.—*Voigt*, p. 732, *Cyc. of India. Art Balanophora, Dr. Hooker, Himalayan Journal, p.* 68, *Fergusson.*

BALANITES ÆGYPTIACA, *Delile.*

Balanites Ægyptiaca, var. Indica, *W. Ill.*
Ximenia Ægyptiaca, *Roxb.*
Ximenia Americana, *Linn.*

Hingon. BENG.
Hingun Bet. DUK.
Nanjunda wood tree. ANGLO-TAM.
Soum. EGYPT.
Hingg. PANJ.
Hingot. PANJ.
Hingor. ,,
Nanjunda maram. TAM.
Gara chettu. TEL.
Gari ,, ,,

This small, thorny tree, has a girth of 18 inches, has alternate, bifoliate leaves, with greenish-white flowers. It is cultivated in Egypt and Jerusalem, where it is made into walking sticks on which they inscribe the word Jordan in Hebrew characters. It is found throughout India, grows in Coimbatore, and is common about Delhi, and in the Doab as far as Allahabad, and especially on the banks of the Jumna, and grows in the Panjab from Delhi westward to Rohtuk. It flourishes in black soil. The wood is soft, shoe-makers' boards are made of it, and it is used for fuel. Roxburgh describes the wood of Ximenia Americana as yellow like sandal and says that brahmins often substitute its powder in lieu of powdered sandal wood. Its leaves are slightly acrid and are said to possess anthelmintic properties. The fruit, when ripe, can be eaten without inconvenience, but Dr. Roxburgh describes the pulp as exceedingly bitter and having an offensive greasy smell. It is about the size of an egg and covered with a smooth dry cortex. It is used in native fireworks; the kernel being scooped out the shell is filled with gun-powder, and explodes with a very loud report. A fat oil, called zachun? *qu zaitun?* is extracted from the seeds. The fruits are said to be mixed in commerce with myrobalans.—*Roxb.* ii. 253, *Drs. Wight, Riddell, O'Shaughnessy, Voigt., J. L. Stewart, Mr. Jaffrey.*

BALOGHIA LUCIDA, Blood-wood tree of Norfolk island, attains a height of 40 feet, but is of small diameter. It yields a blood-red coloured sap, which serves as an indelible paint.—*Bennett's Gatherings.*

BALSAMODENDRON AGALLOCHA, *W. & A.*

Balsamodendron Roxburghii, *Arn., Wight Ill.*
Amyris commiphora, *Roxb.*
,, agallocha, *Roxb.*

Googgul. BENG.
Bòdanki chettu. TEL.

This small tree grows in the Central Provinces, Assam and the Garrow hills. Its timber is rapidly destroyed by white ants, but it burns brightly and makes good torches. It produces the gum bdellium of commerce, and perhaps of Dioscorides, the Googul or Gubdi of the Central Provinces, which is an article of trade. The whole plant, while growing, is considerably odoriferous, and when any part is bruised and broken it diffuses around, to a considerable distance, an agreeable fragrance like that of myrrh. Trunk crooked. Wood unknown. —*Roxb.* ii. 244, *Voigt, Fl. Andhr., Major Pearson, W. Jacob, Esquire.*

BAMAU, BURM.

A close-grained wood of Pegu?—a possible substitute for box-wood, prized by Karens for bows. A cubic foot weighs lbs. 52. In a full-grown tree on good soil the average length of the trunk to the first branch is 30 feet, and average girth measured at 6 feet from the ground, is 6 feet.—*Dr. Brandis, Cal. Ex. Cat.*

BAMAW. A tree of Akyab, but not very plentiful. Used by natives for bows, &c. (This seems identical with the last).—*Cal. Cat. Ex.* 1862.

BAMBUSA, THE BAMBOO.

Bansh. BENG.
Bamboo. ENG.
Bambou. FR.
Indianischer rohr. GER.
Bans. HIND.
Bamba. ,,
Bambu. IT. MALAY.
Preng. JAV.
Mambu. MALAY.
Buluh. ,,
Kul mulla. MALEAL.
Mungal. TAM.
Bongu veduru. TEL.
Kichakai? ,,
Penti veduru. ,,
Potu ,, ,,

The Bamboo, the most gigantic of the grasses, consists of many species, which are applied to so many useful purposes, that it would be difficult to point out any object in which strength and elasticity are requisite, and for which lightness is no objection, to which the stems are not adapted in the countries where they grow,—hollow cases, bows, arrows, quivers, javelin, spear and lance-shafts; masts of vessels, spars, yards and boat-decking; fishing rods, stakes for stake nets and river crab nets and fishing poles; bed posts, walking sticks; tent poles, flag poles and the poles of palanquins; scaffolding for building purposes, the floors and supporters of rustic bridges, scaling ladders, durable water pipes, and the lever for raising water; carts, litters and biers: implements for weaving, portable stages for native processions: raised floors for granaries; pen-holder, bottle, can, pot, measure, distilling tube, tongs, toasting fork, baskets, buckets and cooking pot; rafts for floating heavy timber, frame-work of houses, floorings of houses, scaffolding, planking, uprights in houses and roofing; bamboo ware, handles of parasols, and umbrellas; books, musical instruments, paper,

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pens, rules, cups, cages, pipes and pipe sticks, sumpitan or blowing tube, chairs, seats, screens, couches, cots and tables, and, parts of it are used as pickles or candied, and other parts made into paper. As will be seen below, there are many species of bamboo: and, in the Khassia Hills alone, there are fifteen.

1. Bambusa agrestis, *Poir*. On mountainous and dry desert places in all China, Cochin-China and the Malay islands. Joints crooked, often a foot thick, a foot and a half long and nearly solid.

2. Bambusa amahussana, grows in Amboyna and Manipa, has short joints and a thick wood.

3. Bambusa apus, *Schultes*. A gigantic species growing on Mount Salak in Java, stems 60 or 70 feet high, and as thick as a man's thigh.

4. Bambusa aristata, *Loddig*. Slender stems.

5. Bambusa arundinacea, *Willde; Roxb*.

Arundo bambos, *Linn*
Nastus arundinaceus, *Sm*.
Bambos arundinacea, *Zet*.

Magar bans. HIND.
Nas. ,, ,,
Unalee. SING.
Mungil. TAM.

Mr. Thwaites considers B. arundinacea, and B. spinosa, identical. Stems grow in clusters of 10 to 100, and are straight for 18 or 20 feet. Enormous quantities are annually rafted along the Ganga and Ram Ganga rivers and down the Ganges canal.

6. Bambusa aspera, *Schult*. Found at the foot of mountains in Amboyna with stems 60 to 70 feet high, and as thick as a man's thigh.

7. Bambusa balcooa, *Roxb*.

Dendrocalamus balcooa, *Voigt*.

The Balcooa bans and Dhooli balcooa of Bengal is of gigantic size and reckoned there the best for building purposes. Before using it, it is steeped in water for a considerable time.

8 Bambusa bitung, *Schult*. Found in Java.

9. Bambusa Blumeana, *Schultes*. A native of Java, with stems as thick as a child's arm.

10. Bambusa maxima, *Poir*. Found wild in Cambodia, Bally, Java, and various islands of the Archipelago. It grows 60 to 70 feet high, and as thick as a man's body. Its wood is however very thin.

11. Bambusa mitis, *Poir*. Cultivated in Cochin-China, wild in Amboyna. Its stems are thin but sometimes as thick as a man's leg, and 30 feet long, and are said to be very strong.

12. Bambusa multiplex, *Lour*. (*Qu*. B. nana?) Stems 12 feet long and an inch thick, cultivated for hedges in the north of Cochin-China.

13. Bambusa nana, *Roxb*. The Chinese Dwarf Bamboo. A native of China, makes beautiful close hedges and fences and the handles of the Chinese umbrellas are made of it. It grows near Colombo and Galle.

14. Bambusa nigra *Loddiges;* of the neighbourhood of Canton, where its stems, not more than a man's height, are cut for walking sticks and handles of ladies' parasols.

15. Bambusa prava forms large woods in Amboyna, which come down to the coast: its leaves are 18 inches long and 3 or 4 inches broad.

16. Bambusa picta, common in Ceram, Kelanga, Celebes and other islands of the Archipelago. Its joints are 4 feet long and 2 inches thick, and are used for light walking sticks.

17. Bambusa spinosa, *Roxb*. The *Behor bans*, spined. Common about Calcutta and in the south of India. It has a small cavity and is therefore strong. Its stems are from 30 to 50 feet long; used for clubs, walking sticks, poles and spearshafts. Mr. Thwaites thinks B. arundinacea, and B. spinosa varieties of the same plant.

18. Bambusa spina.

Conta Banso. URIA.

Extreme height 80 feet. Circumference 1½ feet. Two species of bamboo which abound in Ganjam and Gumsur.

19. Bambusa stridula. *Moon, Cat*.

Bata. Lee SINGH.

This small bamboo covers thousands of acres in Ceylon. Its stems are in great request for fences.—*Fergusson*.

20. Bambusa stricta, *Roxb*.

Dendrocalamus strictus, *Voigt*.
Nastus strictus, *Sm*.

Somewhat spiny. Its great strength, solidity and straightness render it fit for many purposes. Lance-shafts are made of it.

21. Bambusa tabacaria, *Poir*. Grows wild in Amboyna, Manipa and Java, its stems with nearly solid joints, 3 or 4 feet long but not thicker than the little finger, when polished, make the finest pipe sticks. The outside is so hard that it emits sparks of fire when struck with the hatchet.

22. Bambusa tulda, *Roxb*.

Dendrocalamus tulda, *Voigt*.

The Tulda or Pika bans of Bengal and India is common all over Bengal, and grows rapidly to 70 feet long and 12 inches in circumference, rising to their full height in 30 days. Improves in strength by steeping in water. The *Jowa bans* with long joints is one variety, and the *Basini bans* used to make baskets, is another.

[illegible] Bambusa vulgaris, *Wendl.* Its stems are from 20 to 30 feet long, and as thick as a child's arm.

In one of his reports, Dr. Cleghorn mentions that immense quantities of fine bamboos are floated down the various rivers of the western coast of India. They are one of the riches of those Provinces. They are ordinarily 60 feet long and five inches in diameter near the root, these are readily purchased standing at 5 Rupees per 1,000, and small ones at 3½ Rupees per 1,000. Millions are annually cut in the forests and taken away by water in rafts or by land in carts. From their great buoyancy, they are much used for floating the heavier woods as (Mutte) Terminalia tomentosa, and (Biti) Dalbergia arborea, and piles of them are lashed to the sides of the pattimars going to Bombay. The larger ones are selected as outriggers for ferry boats, or studding-sail-booms for small craft. He tells us that in addition to the vast export by sea, it is estimated that two lacs are taken from the Soopah talook eastward. The Malabar bamboo is much smaller than that of Pegu (Bambusa gigantea) which is 8 inches in diameter. At another place he says that immersing in water or better still, in a solution of sulphate of iron or lime water, is attended with good results, as it extracts the sweet sap which would otherwise induce decay. But, when it is intended to split the bamboos for reepers, this should be done before steeping them in the metallic bath. The merchants on the western coast of India prefer the water-seasoned bamboos which have been months in the water attached to the rafts, that are floated down the Nelambur and Sedasheghur rivers to the sea. The bamboos, there, are often eighteen yards long, and are brought down in immense floats tied together by the root ends in bundles of fifty which are turned towards the forepart of the float. In Singapore the following bamboos, Buluh, Malay, are most in use ;

Buluh Bittang. The large bamboo ; it is used for house-building and for ladders ; a section forms a water-pitcher ; fishing weirs, &c., are constructed of it.

B. Trimiang. Used by the wild tribes to make their blow-pipes for poisoned arrows.

B. Bitting. A large bamboo ; its root is pithy ; it is used by the wild tribes to make bows.

B. Duri. Thorny bamboo, used for high fences ; it grows 60 or 70 feet high.

B. Gading. Yellow bamboo.

B. Siggei. Used for ladders to scale precipices.—*Roxb. Fl. Ind., Eng. Cyc., Dr. Mason's Tenasserim. Dr. Cleghorn's Reports, Dr. Hooker's Him. Journ., Mr. R. Thompson, Dr. J. L. Stewart.*

BAN-BOAY, Burm. In Amherst, a strong and useful wood, a kind of Mimosa, (*qu.* Acacia ?) employed for house posts.—*Captain Dance.*

BAN-KHA, Burm. In Amherst, a peculiar kind of wood, colour grey, used for house posts, and other common purposes.—*Captain Dance.*

BANKSIA INTEGRIFOLIA, a tree of Australasia, which grows to 30 or 40 feet high with a circumference of 6 to 12 feet. It is of peculiarly stiff rugged growth, and its timber is used in boat-building.—*Bennett.*

BANKSIA PALUDOSA, a tree of Australasia, which grows in marshy alluvial soil.—*Bennett.*

BANNI, a tree of the Panjab, Jhullundhur, resembles the bán, except that the wood is of a white colour, but it is applied to the same purposes as the bán. It is also a smaller tree.—*Lieut. Col. Lake.*

BARRINGTONIA, *Species.* There is in the Tavoy and Mergui jungles a white-flowered species of Barringtonia with drooping spikes of white flowers, three or four feet long ; and which would be much admired if introduced into the cities. The leaves are very large and lyre-shaped, and both flowers and foliage would contrast well with the other trees around it. The character of the wood, is not known.—*Dr. Mason.*

BARRINGTONIA ACUTANGULA, *Gærtn.*

Stravadium rubrum. *DC.*
Stravadium coccineum, *DC.*
Eugenia acutangula, *Linn.*
Meteorus coccineus, *Lour.*

Kyai-tha. Burm.
Samandar phal. Hind.
Hijjul. Hind. Beng.
Tsjeria-samstravadi. [Maleal.
Karpa. Mahr.
Ijul. Sans.
Ella midella. Sing.
Radami. Tam.
Kanapa chettu. Tel.
Kanigi " "

This is a large handsome tree, with dark scarlet-coloured flowers. It grows in Saharunpore, the Morung hills, Bengal, Chittagong, in both the peninsulas of India, and is plentiful in the Tharawaddy district. The wood is of a red colour, hard, and of a fine grain, is used in constructing carts, and is equivalent to mahogany. Dr. Mason says it is very abundant in the Tenasserim forests, of which it is a great ornament.—*Roxb.* ii. 635, *Drs. O'Shaughnessy, McClelland, Mason, Voigt, Useful Plants, Elliot, Mr. Fergusson.*

BARRINGTONIA RACEMOSA, *Roxb.*

Eugenia racemosa, *Linn.*
Butonica sylvestris alba, *Rumph.*

Samudra pu. Maleal.
Samstravadi. Maleal.
Samudra maram. Tam.
Karpa, Tel.

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This stout timber tree is a native of the Moluccas, Penang, the delta of the Ganges and Malabar. Its root is slightly bitter, and considered by the hindus to be aperient, cooling, and febrifuge.—*Roxb.* ii. 634, *Flora Andhrica, Voigt.*

BARRINGTONIA SPECIOSA, *Linn.*

Commersonia Sonnerat Guin.

Butonica speciosa, *Lam.* | Maumea Asiastica, *Linn.*

Kyai-gyee. BURM.	Moodilla. SINGH.

This large, umbrageous and beautiful tree is a native of Pegu, the Tenasserim Provinces, the Malay Archipelago, Singapore, the Moluccas, and the South Sea Islands. It is very plentiful in Pegu. Its wood is red, hard, of a fine grain, and equivalent to mahogany. It is used in the construction of carts. The fruit is mentioned by Ainslie as being used in Java for intoxicating fish.—*O'Shaughnessy, page* 337, *McClelland, Roxb.* ii, 636, *Voigt, Mr. Fergusson.*

BARU, *Malay;* Kawal, *Javanese:* is a gossamer-like substance, found at the base of the petioles of the Gomuti palm, the Arenga saccharifera. It is imported into China where it is applied like oakum, for caulking, and also for tinder.

BASSIA, a genus of plants belonging to the natural order *Sapotaceæ*, found in the East Indies and in Africa, where they are of great economical importance on account of the abundance of a sweet buttery substance which is yielded by their seeds when boiled. B. butyracea, B. latifolia and B. longifolia occur in India. Bassia cuneata and B. sericea, *Bl.*, are trees of Java: the African butter tree is B. Parkii, G. Don.—*Eng. Cyc., p.* 396.

BASSIA, *Species.* In the Southern Provinces of Tenasserim, a Bassia tree is quite abundant in a few localities: and it is said to afford a timber in no way inferior to teak.—*Dr. Mason.*

BASSIA, *Species.* A species of this tree grows on the banks of streams, at 3,000 feet on the Animullay hills. It yields a sort of gutta percha.—*Beddome.*

BASSIA BUTYRACEA.

Indain Butter tree. ENG.	Phalwarra. HIND.
Falwa. HIND.	Yel-pote. LEPCHA.

This tree has large umbrageous foliage. Its trunk sometimes measures 50 feet in height and 5 or 6 feet in circumference. It grows in the lower hills and warm valleys of Eastern Kumaon, and is found wild in Sikkim, Nepaul and on the Almora hills, but its timber is nearly as light as that of the Bombax heptaphyllum, the Semul or Cotton tree, and is of no value. A delicate white-coloured oil, solid at 95° is expressed from the bruised kernels, which is used in medicine and for unction.—*Roxb.* ii. 527, *Eng. Cyc., Hooker, O'Shaughnessy, Mr. R. Thompson.*

BASSIA ELLIPTICA, *Dalzell.*

Isonandra Cullenii, *Drury.* | Pachonta, *Can.*

This majestic tree has been traced from Coorg to Trevandrum. It yields a substance which, as was at one time thought, would be a substitute for Gutta Percha, but subsequent report is less favorable. The timber is hardish, prettily veined, takes a good polish, and deserves attention—*Dr. Cleghorn's Forests and Gardens, p.* 13.

BASSIA LATIFOLIA, *Roxb.*

Mohu. BENG.	Ipei?	TAM.
Mahwa Tree. ENG.	Illupa.	,,
Mahwa. HIND.	Kaat Illupa.	,,
Muha? ,,	Epi?	TEL.
Moho. MAHR.	Ippa.	,,
Poounam. MALEAL.	Ippe chettu.	,,
Madhaka. SANS.		

This is a very useful tree. It has a straight but short trunk, and yields a hard and very strong wood. It grows in the mountainous parts of the Circars, in Bengal, Malwa, Nagpore, Rajwarra, Guzerat, the Konkans, Kumaon and Ghurwal, not abundant in the Punjab except in parts of the Kangra district. In the Circars, it is never felled by the natives, and it is preserved in Nagpore on account of its large fleshy flowers which are eaten raw by the natives and used in distilling arrack. It is common all over the Bombay jungles, both on the coast and above the ghauts. The timber, in Nagpore, is from 15 to 20 feet long, and in girth 4 or 5 feet. The tree attains its full size in 80 years, and has a girth of 6 feet. The character of its wood seems to vary in different localities. Captain Sankey says that in Nagpore it is of a pinkish color, and but a weak timber, while, from being invariably rotten at the heart, 4 to 6 inches square of really good sound timber is all that can be reckoned on. In the plains the tree is preserved for the flower, and consequently is very little used. Both Major Pearson and Lieut. G. Doveton, however, writing from the Central Provinces, dissent from Captain Sankey's opinion. Major Pearson cannot agree with Captain Sankey that the *Bassia latifolia*, Mowa, is "a weak timber." It is used much in Upper India for all sorts of wood-work, but in the Central Provinces a well-grown Mowa tree in full bearing in a good year will bear four Rupees worth or even more of flowers, which are used to extract arrack from. It is therefore seldom felled for timber, but there, as in Upper India, and in Guzerat, the wood is strong and tough. Barren trees are sometimes felled, but it is difficult to procure pieces of greater length than 12 or 13 feet. The heartwood of an old tree is deep reddish-brown. There are enormous belts of it ex-

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ten[illegible] along the foot of both faces of either range of hills, which skirt the Nerbudda valley. —(*Major Pearson, C. P.*) Lieut. Doveton, likewise, says "as remarked by Major Pearson, Bassia latifolia, is by no means a weak timber"—and I have uprights, quite 30 feet in height, bearing a very large crushing weight. —(*Lieut. G. Doveton, C. P.*) But Captain Sankey himself adds that in the Upper Provinces of India, the timber is more esteemed, and has been used for door and window frames. He does not class it as a building material, and it is eagerly devoured by white ants. Dr. Gibson however, says that the wood, particularly the large logs brought from the Barria forest and Kupperwunje hills, is extensively used for house and cart purposes in Guzerat, but seldom appears in the market in Bombay or elsewhere. It appears strong and tough. In the Upper Provinces of India, its wood is described as hard and strong and proper for the naves and felloes of wheels. Roxburgh gives also, as vernacular names, Madhuka, Guroodshpu, Madharama; Voonaprustha and Mudhoo.—*Roxb.*, ii. 526, *Voigt, Capt. Sankey, Dr. Gibson. M. E. J. Rep., Flora Andhrica, Mr. R. Thompson, Major Pearson, Lieut. G. Doveton, Lieut.-Col. Lake and Mr. Powell.*

BASSIA LONGIFOLIA, *Linn.*

Wild Sapota Tree. ENG.
Mahwa. GUZ.
Mohe-ka jhar. HIND.
Ellupi. MALEAL.
Tel-mee-gaha. SINGH.
Mee. ,,
Illupi? TAM.
Elupa. ,,
Kat-Illupa. TAM.
Ennai carrai maram? ,,
Yepa? TEL.
Ippa. ,,
Pinna. ,,
Ippa manu. TEL.
Oodooga maram of Wynaad

This tree has a pretty straight trunk and of a considerable thickness but short in proportion to the size of the tree. The wood is as hard and durable as teak, but not so easily worked. It grows in Ceylon, where it is very much cultivated: it grows in the Animullays, in Coimbatore, on the Malabar Coast, in the Wynaad and in the Bombay forests north of the Goa border, in Dharwar and North Canara. It is a large tree, a good deal like Bassia latifolia, but its leaves are narrower, and its flowers much more fleshy. It is a native of the Peninsula of India, and is found in plantations along the southern coast of Coromandel. In Ceylon, its timber is used for the keels of dhonies, for bridges and in house-building, and large quantities of oil are made from its fruit. Mr. Rohde also says that the Ippi of the Teloogoo country is valued for keels of ships and for planking below the water line. Exposed to the wind and sun in the log, it rends into strips, but, it is considered a good wood for trenails, and it is comparatively free from the attacks of the Teredo navalis. It is procurable among the logs brought down the Godavery. In the Wynaad, it is known as the Oodagoo maram, and is there an ordinary sized tree: its wood being much used on the Malabar side for building. Dr. Wight says it is a light-coloured, hard and durable wood, nearly equal in these respects to teak, but much smaller. In Coimbatore it is much used in the construction of carts, where great strength is called for. In Malabar, where it attains a large size, it is used for spars. Dr. Cleghorn describes it as a good wood for trenails. It grows in the northern province of Ceylon, and its wood which is said to last from 25 to 80 years, weighs 61 lbs. to the cubic foot. It is there used as keels for dhonies, for bridges and in house-building. The seeds contain about 30 per cent. of oil of a bright yellow colour. 12½ lbs. of seed, in the ordinary native rude way of expressing, produce 2 English gallons of oil. The oil or its seed may form an important article of export as a putty oil. This oil makes excellent candles and soap. Its chief use is, however, for burning in lamps, and as a substitute for butter in native cookery. In medicine, the oil is used externally to cure the "Itch" and other cutaneous disorders; and the leaves, milk of the green fruit, and bark, are boiled in water as a remedy in rheumatic ailments.—*Roxb.* ii. 523, *Messrs. Mendis, Rohde, Fergusson and McIvor, Drs. Wight, Mason and Cleghorn, Flora Andhrica.*

BASTARD WOODS. An Anglo-Indian term applied to woods of India which have some outward resemblance to other woods: such as,

Bastard Teak, Chiri Teku, TEL., applied to several kinds of trees with large leaves. On the Nagari hills the Yanadi apply it to Dillenia (now Wormia,) bracteata. In Bombay it is applied to the Butea frondosa, the Ban-Teak or Ben-Teak, being the Lagerstræmia microcarpa.

Bastard Ebony, in Ceylon, is their Kadem-Beriye, SINGH., and probably a species of Dalbergia.

Bastard Cedars, of Southern India, are the Soymida febrifuga, and Guazuma tomentosa.

Bastard Sago-palm, of Southern India, is the Caryota urens.

BAUGLAN is the western talooka of Kandesh. Stretching north in Bauglan is a series of valleys separated by small chains of hills. These hills form, as in the Poona Mawuls, ground naturally formed for forest reserves.—*Gibson's Bombay Forest Reports of* 1857-60, *p.* 38.

BAUHINIA. A genus of plants, many of which afford valuable timber and useful woods, while others are but climbing plants.

CSL

They grow in the plains of the south of India, but Dr. Hooker, at a thousand feet above at Punkabaree in the outer Himalaya, found the prevailing gigantic timber scaled by such climbing Leguminosæ, as Bauhinia and Robinia, which sometimes sheathed the trunks or spanned the forests with huge cables joining tree to tree. Several of the species in India are as yet undetermined. The woods are often of a dark colour.—*Hook. Him. Journ.*

BAUHINIA, *Species.*

Ambhota. Uria.

A tree of Ganjam and Gumsur. Extreme height 20 feet, circumference 2 feet, and height from the ground to the intersection of the first branch, 7 feet. Useless except for firewood.—*Captain Macdonald.*

BAUHINIA, *Species?* A small timber tree, native of Tenasserim, bears a sour twin-formed leaf, and a pod containing sweet pulp like that of the honey locust of America.—*Dr. Mason.*

BAUHINIA ACUMINATA, *Linn. Roxb.*

B. candida, *Ait.* not *Roxb.*

Chitka. Beng.
Kanchan. „
Kanchan chakta. Beng.
White Bauhinia. Eng.
Mountain Ebony. „
Cuchunar. Hind.
Duolo Kunchun. Mahr.
Velutta mandarum. Maleal.
Mandareh. Tam.
Vellai Muntharai maram. Tam.
Deo-kanchana. Tel.
Kachana. „
Kasana. „

A small ramous tree or large shrub, grows in Mauritius, Ceylon, the Panjab, Assam, both peninsulas of India. Rare in Coimbatore, and does not seem to be indigenous in the Bombay side, where it is cultivated, as also in the Dekhan and Tenasserim. It is a handsome shrub, 8 or 10 feet high, with large pure white flowers.—*Drs. Roxb.* ii. 324, *Riddell, Gibson, Wight, Mason, Flora Andhrica, Voigt*, 253.

BAUHINIA ALBIDA.

B. candida, *Roxb.* 3. | White Bauhinia.
Duolo Kunchun. Mahr. | Vellai-munthari-poo. Tam.

The flower buds of this pretty tree yield an excellent vegetable for curries,—the flowers of all the Bauhinia are eaten by the natives,—the flowers are very handsome when open, being almost pure white, with a sweet odour. Dr. Gibson says that this tree is found in the Bombay forests, but rarely; and is more common in the vicinity of villages. It reaches a fair size, and gives a wood of a good quality, but seldom of scantling sufficient for house purposes.—*Mr. Jaffrey, Dr. Gibson.*

BAUHINIA ANGUINA, *Roxb.*

Bauhinia piperifolia. *Roxb.*

Nang-put. Hind.

It grows in Assam and the Concans. Is an extensive and rambling shrub, with flexuous compressed stems and small white flowers. Wood hard, but porous and nearly white. This Bauhinia is highly ornamental.—*Roxb.* ii. 328, *Riddell, Voigt*, 254.

BAUHINIA BRACHYCARPA, *Wall.*

Bwai-jin. Burm.

Grows at Taong Dong. Attains to nearly three or four feet in the Tenasserim Provinces, its wood is white-coloured and adapted for fancy work and cabinet-making. It is there of smaller size than the B. parviflora.—*McClelland, Voigt*, 255.

BAUHINIA CANDIDA, *var.* of B. variegata, *Linn.*

Bauhinia candida. *Roxb.* ii, 318.

Kano-raj. Beng.
Kana-raja. „ Hind.
White mountain Ebony. Eng.
Kuvidara. Sans.
Yuga putra. „

This grows in Prome, Assam, Bengal, Nepal and Oude. It is a small handsome tree with large white flowers, which appear at the commencement of the hot season.—*Roxb.* ii. 318, *Voigt*, 153.

BAUHINIA DIPHYLLA, *Buch.*

This small tree grows in Burmah, on the banks of the Irawaddy.—*M. E. Jur. Rep., Voigt.*

BAUHINIA MALABARICA, *Roxb., Fl. Ind., II.*, 321.

Boay-gy-in. Burm. | Puli Shinta. Tel.

This pretty large tree is a native of Malabar and Animullays, where it blossoms in October and November. Trees about five years old are about 20 feet high and have stems as thick as a man's thigh. It is, also, a tree of the Godavery forests, with a serviceable wood, good and hard. Its legume is filled with a scented pith. It also grows in Assam, at Prome and Malloon. Indeed, it is common in the plains of British Burmah, where its wood is used for the cross pieces of harrows, house posts, &c. &c. A cubic foot weighs lbs. 42. In a full-grown tree on good soil the average length of the trunk to first branch is 15 feet, and average girth, measured at 6 feet from the ground, is 4 feet.—*Roxb.*, ii. 321, *Dr. Brandis, Voigt, Captain Beddome.*

BAUHINIA NITIDA. White Bauhinia.

B. acuminata? | Kana raja. Hind.

Cultivated in gardens at Kotah. Wood not known.—*Irvine Gen. Med. Top., p.* 191.

BAUHINIA PURPURASCENS, *var.* of B. variegata, *Linn.; Roxb. Fl. Ind., II*, 319.

Bidal. Beng.
Rakta-kanchan. Beng.
Segapoo Munthari maram. Tam.

A tree, with beautiful purple flowers: It grows in the peninsula of India, in Serampore,

GSL

P[illegible]am, Monihari and Puranya. Quality of wood unknown.—*Voigt, Mr. Jaffrey, Roxb.* ii. 319.

BAUHINIA PURPUREA, *Linn.*

Bauhinia Coromandeliana. *D. C.*

Deva Kanchun. BENG.
Sarul mara. CAN.
Purple mountain Ebony. ENG.
Kunchun. MAHR.
Shegapu Munthari maram. TAM.
Bodanta chettu. TEL.
Pedda aré. ,,
Kanchan. ,,

A tree, with very large, deep rose-colored fragrant flowers. Native of the Mauritius and Coromandel, grows, however, in the Malabar, Canara, Godavery and Cuttack jungles in all the warm valleys of Ghurwal and Kumaon, in Oudh, Assam and Burmah. It grows to be a large tree in the mountains of India. In Canara and Sunda found both above and below; most common near the Gungawallee creek. Wood strong and good, close-grained and durable, used for agricultural implements; but seldom large enough for building. In Kumaon it can be obtained 12 to 15 feet long, and 30 to 35 inches in girth.—*Roxb.* ii. 320, *Drs. Gibson, Riddell, Voigt, Mr. Jaffrey, Flora Andhrica, Mr. R. Thompson.*

BAUHINIA RACEMOSA, *Lam.*, not *Vahl.*

Bauhinia parviflora. *Vahl.; D. C.; Roxb.*
Bauhinia epicta. *Kön.*

Ban-raj. BENG.
Bwai-jin. BURM.
Hpa-lan. ,,
Mawil Ghila. HIND.
Apta. MAHR.
Kosundra. PANJAB.
Taur, Hills of ,,
Marwar. ,,
Astar of Central Provinces
Atcha maram ? TAM.
Malu ? TEL.
Mali-jhun ? TEL.
Patwa Mawal ? ,,
Ada ? ,,
Aré. ,,
Adavi avisa. ,,

This tree is described by Dr. Gibson as found throughout the Bombay forests, both on the coasts and inland. Found also in Mysore, the hilly parts of the Concans, and ghats of the Bombay side, grows in the Central Provinces, is common in all the warm valleys of Kumaon, along the forests of the Sewalik Hills, in the hot valleys of the Himalaya, from the eastern parts of the Panjab, Sewalik tract, and the doons of the N. W. to the valleys of Assam, at Monghyr in Bengal and in British Burmah, is very plentiful throughout the Tounghoo and Prome forests, where it attains 3 feet in girth. The wood is small, but the heart-wood is exceedingly hard and fine. In British Burmah a cubic foot of the wood weighs lbs. 44. In a full-grown tree, there, on good soil, the average length of the trunk to the first branch is 10 feet, and average girth, measured at 6 feet from the ground, is 3 feet. In Bombay, the wood is reckoned very strong; but is never found of a good size, in British Burmah, however, it is said to be of a white colour and adapted for fancy work and cabinet-making. The bark is used for making matches, makes good strong ropes, its gum is used medicinally, and its seeds are roasted and eaten.—*Drs. Gibson, McClelland, Wight, Brandis, Mason, J. L. Stewart, Voigt, Mr. Jaffrey, Madras Museum, Flora Andhrica, Mr. R. Thompson, Major Pearson.*

BAUHINIA RETUSA, *Roxb.* Grown in the Calcutta Botanical Gardens; yields a brownish mild gum like that of the cherry tree.—*Roxb.* ii. 322, *Voigt,* 254.

BAUHINIA RICHARDIANA, *Wall.*

A small tree, introduced from Madagascar. Wood not known.—*Madras Hort. Gard.* 58, *Voigt.*

BAUHINIA SCANDENS, *Linn.; Willde.*

Bauhinia lingua. *DeCand.*

Rod Bauhinia. ENG.
Esculapian do. ,,
Naja balli. MALEAL.

Grows in the Moluccas, Concans, Assam, is not uncommon about Gowhatti and is a common species at Sylhet. Mr. Mason mentions that the tree is remarkable for its contorted stem, and it is surmised by Loudon to have been the origin of Esculapius' snaken rod which he brought from India, but snakes assume the form of that rod when in congress. Bauhinia scandens, in its properties and uses, is similar to the B. racemosa. Its fibre is used by the Naga race, and cloth is made from it. A line made from the fibre sustained for forty-five minutes 168 lbs., having stretched six inches only in three feet, and therefore is almost of the same strength as the best Sunn hemp of Bengal. But Captain Thompson reported that, whether from the nature of the material or the mode of preparation, he found the fibre so harsh and stubborn and to so stick together that the heckles tore it to pieces and injured its strength.—*Roxb.* ii. 326, *Mason, page* 68, *Royle, page* 296, *Voigt.*

BAUHINIA TOMENTOSA, *Linn.*

Yellow Bauhinia. ENG.
Kachnar. HIND.
Kanchana. MALEAL.
Usamaduga. SANS.
Petan. SINGH.
Kát-atti. TAM.
Triviat putrum. ,,
Theer-vala-counaie. ,,
Kachini. TEL.

A native of the Mauritius, of the Eastern provinces of Ceylon, of Coimbatore, the Concans, Patna, Oude, Nepaul and Assam. This, like the atcha maram, is a strong very dark-coloured wood, hence the name Kaat Atti or Wild Ebony. Even the younger branches show the heart-wood very dark-brown, the bark of this is employed as extemporary cordage. It is a tree of small size, the wood dark-brown and very hard and not much in use, being too small to be of any commercial value.—*Roxb.* ii. 328, *Dr. Wight, Voigt, Dr. Cleghorn, Mr. Jaffrey, Mr. Mendis.*

BAUHINIA TRIANDRA, *Roxb.*—This is a native of Bengal and, when in flower, is one of the most beautiful of the Bauhinia.

CSL

Its trunk is straight and of considerable size. Its flowers are large and white.—*Roxb.* ii. 320, *Voigt.*

BAUHINIA VAHLII, *W. & A.*

B. racemosa. *Vahl.; Roxb., Fl. In.*
B. scandens. *Roxb. in E. I. C. Mus.*

Chamboolee. DUK.
Mahwal. HIND. ?
Adda. TEL.
Shyalee. URIA.

This is an immense scandent shrub, with a circumference of 1½ feet. It grows in the Thull ghats, ravines at Khandalla, Morung mountains, in the Derra Dhoon and Kumaon. In Ganjam and Gumsur it abounds in the jungles, and yields a fibre which is most extensively used. The leaves which are a foot in length with rounded lobes, are used for eating from and for making "tullari"—small umbrellas worn on the head and for packing. The seeds are used medicinally. Dr. Riddell describes it as an immense scandent shrub; leaves about a foot in breadth, with rounded lobes; legumes pendulous, from twelve to twenty inches long, covered with a brown velvet down.—*Roxb.* ii. 325, *Riddell, Voigt, Captain Macdonald, Fl. Andh., Useful Plants.*

BAUHINIA VARIEGATA, *Linn.*; *W. & A.*; *Roxb.*

Bauhinia purpurascens.
Bauhinia candida, *Roxb.* not *Ait.*

Ructo-kanchan. BENG.
Irkumbalitha mara. CAN.
Mountain Ebony. ENG.
Kuchnar. HIND.
Sona. HIND.
Chovanna-mundari. MAL.
Kairwal. PANJAB.
Kuvidara? SANS.
Borodhá. URIA.

An ornamental tree with variegated flowers, sparingly found in the Bombay forests, and, there, it never reaches a size for a 10-inch plank. The heartwood, however, is hard and good. In Ganjam and Gumsur its extreme height is 30 feet, circumference 2 feet, and height from the ground to the intersection of the first branch 8 feet, and is tolerably common and used for firewood. The flower pods are eaten as a sort of vegetable.—*Drs. Irvine, Mason, Gibson, Riddell, Cleghorn, Voigt, and Captain Macdonald.*

BAUHINIA VARIEGATA, *L. var.* purpurascens.

Phanera purpurea, *Bth.*

Anemone shrub. ENG.
Red arghawan. ,,
Kolar. PANJ.
Karel ,,
Padriar ,,
Karar. PANJ.
Kachnar. ,,
Anguri. ,,
Arghawan. PUSHTU.

Under the above names and synonyms, Dr. J. L. Stewart writing from the Panjab, describes a Bauhinia as a small tree in the Salt Range, and which grows wild up to 4,000 and 5,000 feet near the Indus, growing also in Affghanistan. It rises to 20 feet in height. Its wood is red, light, soft, decays quickly and is liable to the attacks of insects. It is said to be made into spear shafts. It seems to be Roxburgh's B. variegata, *Willde.*, and he gives kuvidara and Ructa kanchan as its synonyms, and says it is one of the most stately of the genus and grows to a tree of considerable size.—*Dr. J. L. Stewart*, p. 99, *Roxb.* ii. 319.

BAUJHONOO, URIA ? In Ganjam and Gumsur, a tree of extreme height, 45 feet, circumference 5 feet, and height from ground to the intersection of the first branch, 22 feet. The wood is used for bandy wheels on account of its strength. It is rather scarce.—*Captain Macdonald.*

BAYGOONA, URIA ? A tree in Ganjam and Gumsur of extreme height, 24 feet, circumference 1 foot, and height from the ground to the intersection of the first branch, 5 feet. The wood is useless except for firewood. The leaves are used medicinally for fever. The tree is tolerably common.—*Captain Macdonald.*

BE-AR OR BI-AR WOOD. A tree of Meera Forest, near Abbottabad, Hazara, of the natural order, *Coniferæ.* It is Pinus longifolia ?—*Cal. Cat. Ex.* 1862.

BEDEE. A taluk in the Belgaum collectorate with forests; but Dr. Gibson says that neither teak, seesoo, nor honee (*Pterocarpus marsupium*), the three most valuable woods in the forest, had been spared.—*Report*, 1849 *to* 1856, p. 8.

BEE-EW, BURM. A timber of Tenasserim not identical with *Thee Bew Tha.* Its maximum girth is 3 cubits, and maximum length 22 feet. Trees very abundant near the sea or the river's edge, all over the Tenasserim provinces. When seasoned, sinks in water. It is a very hard, strong wood; used in rice mills, where great strength and durability are indispensably required: recommended for handles of tools.—*Captain Dance.*

BEHENTA, URIA ? A timber tree of Ganjam and Gumsur, extreme height 30 feet, circumference 3 feet, and height from ground to the intersection of the first branch, 10 feet. It is used for axle-trees, oil presses and rice-pounders. It is also burnt for firewood, the tree being very common. The bark and leaves are used medicinally.—*Captain Macdonald.*

BELOO, TEL. URIA ? A tree of Ganjam and Gumsur, extreme height 30 feet, circumference 3 feet, and height from the ground to the intersection of the first branch, 15 feet. Its wood is sometimes employed for making bandies, but it is chiefly used for firewood, the tree being extremely common: the leaves are used for making a sort of umbrella which is

CSL

Worn on the head by the ryots and coolies in that part of the country.—*Captain Macdonald.*

BELUNNAN, HIND. ? A tree of Chota Nagpore, with hard brown timber.—*Cal. Cat. Ex.* 1862.

BENTHAMIA FRAGIFERA, *Lindl.*

Tharwar. PANJ.
Thesi. ,,
Tharnel. PANJ.

This small tree grows from 4,500 to 7,000 feet in the Panjab Himalaya. Its wood is small. Its fruit is used as a preserve.—*Dr. J. L. Stewart*, p. 111.

BEP-THAN ? In Amherst, a timber used for making handles for spears and swords ; it is a superior wood, and looks like white Jarrool—*Captain Dance.*

BEP-THAN. In Tavoy, a timber used for building.—*Captain Dance.*

BEP-WON. In Tavoy, a timber used for building.—*Captain Dance.*

BERBERIS ARISTATA, *D. C.* ;

Var. *α*. NORMALIS.

Berberis tinctoria, *Lesch.*
,, chitra, *Ham.*
Berberis angustifolia, *Roxb.*

Var. *β*. FLORIBUNDA.

Berberis floribunda, *Wall.*
,, petiolaris, ,,
,, aristata, ,,
Berberis affinis, *Don.*
,, ceratophylla, ,,
,, coriaria, *Royle.*
,, umbellata, *Lindl.*

Var. *γ*. MICRANTHA, *Wall.* ; *Hook. & Thom. Fl. Ind.*

This plant is widely distributed over the mountains of India, and assumes many various forms, which has caused botanists to give it a host of specific names. It is found on the Neilgherry and Pulney Hills at from 6 to 7,000 feet, and in the N. W. Himalaya at 9,000 to 10,000 feet. It is generally known, from its yielding a dye, as Berberis tinctoria. The berries are much esteemed in the countries where they grow for their agreeable acid flavour. In the N. W. Himalaya, they are dried for currants, Zirishk (tursh) and the Ras, Rasawut, or Rasot, is obtained by extract from its yellow wood.

BERBERIS LYCIUM, *Royle.*

Huziz-Hindi. AR.
Raisin Berberry. ENG.
Chitra. HIND.
Kashmal. HIND.

Found on the Himalaya and other mountains in India. There are several other species found on the mountains of India, but none of them have wood of any size.

BERBERIS NEPALENSIS, *Spr.*

Berberis miccia, *Ham.*
,, acanthifolia, *Wall.*
,, Leschenaultii, *Wall.*
Berberis pinnata, *Roxb.*
Mahonia Nepalensis, *D.C*
Ilex Japonica, *Thunb.*

This shrub is found on the Neilgherry, Pulney, and Travancore Hills at elevations of from 5 to 8,000 feet. It is also on the Himalaya, Bhotan, Garwhal, and Khassia mountains. The wood is small and of little use.

BERGERA KONIGII. *Linn.* ; *W. & A.* ; *Roxb.*

Murraya Könígii, *Spreng.*

Barsanga. BENG.
Karripak ka jhar. DUK.
Curry leaf tree. ENG.
Karripak ka jhar. HIND.
Kudia nim. HIND.
Tuah of Kumaon.
Gardala of Kanawar.
Gandla ,, ,,
Barsanga. MALEAL.
Kare-bepon. ,,
Kareyapela ,,
Kristna nimbu. SANS.
Kari-vepelli maram. TAM.
Karivepa. TEL.
Kariampaku chettu. TEL.

A small tree, a native of the mountainous parts of the coast and common throughout the country ; of easy culture, cultivated generally in gardens for its leaves, which retain their fragrance when dry, and are used to flavour curries, mullagatawny, chatnies, &c., and are mixed in the curry pastes and powders prepared in India for transmission to England and other parts of the world ; the mixture of these leaves not only imparts a peculiar flavour to these condiments but adds a zest to them. It grows to a tree of tolerable dimensions, with pinnate leaves strongly scented ; flowers in February and March ; fruit of a deep purple colour ; wood hard and close-grained and might be useful in turnery ; medicinally, the leaves are considered stomachic and tonic, used raw in dysentery, and when roasted are administered in decoction to stop vomiting. The bark and root are employed as stimulants. —*Royle Ill. quoted by O'Shaughnessy, page* 232, *Voigt, Flora Andhrica, Useful Plants, Roxb., Vol.* 2, *p.* 375, *Mr. R. Thompson.*

BERRYA AMMONILLA, *Roxb.*

Trincomallee wood. ENG.
Somendilla. SINGH.
Halmililla. ,,
Hameniel. ,,
Tiricanamalay maram TAM
,, chettu. TEL.
Sarala devadaru. TEL.

Introduced from Ceylon to the continent of India. In the Tamil of Ceylon, *Somendilla*, but it is commonly called *Halmililla* and *Hameniel*, by the Dutch and Portuguese. The wood is annually exported from Batticaloa and Trincomallee, by which latter appellation it is known in the Madras market. It resembles the English ash in colour, and is highly esteemed for its lightness and strength, is straightgrained, slightly pliant, tough and little affected by the atmosphere, and is employed in the construction of the massoola boats of Madras. It is also used for the spokes of wheels, for helves, handles, planes, frames, poles and shafts of carriages, it is inferior to *Sal* for spokes, and to the babool for some other purposes, but it is comparatively light and easily worked. The Madras market is still dependent on importation from Ceylon. Dr. Helfer mentions this tree, as growing on

King Island opposite Mergui, and as a light, strong, and valuable wood. The tree yields the best and most useful wood in Ceylon for naval purposes, and is perhaps the most valuable timber tree of that island. It grows straight from twenty to forty feet high, and from twelve to thirty inches in diameter. It and satin wood were reported by Mr. Edye, in his time, to be the most plentiful and valuable found in Ceylon ; and obtainable at a moderate rate to answer the demands of the navy in India. He said that this may be considered superior to any wood for capstan bars, cross and trussel-trees, cask-staves, battens for yards fishes for masts, boat-building, &c., and he adds that, at Madras, it was highly valued for coach-work from the toughness and fineness of its grain. It grows in the Northern and Southern side of Ceylon, a cubic foot weighs 48 lbs., and it lasts 10 to 80 years, and is there used for casks, tubs, carts, waggons and house-building. It is the best wood for oil-casks in the island.—*Drs. Wight, Cleghorn and Helfer, Messrs. Edye, Rhode, Mendis, and Fergusson M. E. J. R.*

BERRYA MOLLIS, *Wall.*

Pet-woon. Burm.

Found on elevated ground of British Burmah. Wood red, much prized for axles, the poles of carts and ploughs, also used for spear handles. A cubic foot weighs lbs. 60 to 62. In a full-grown tree, on good soil, the average length of the trunk to the first branch is 50 feet, and average girth measured at 6 feet from the ground is 7 feet. It sells at 12 annas per cubic foot.—*Dr. Brandis.*

BETULA, the Birch. Some species of this genus grow in the Himalaya. Betula acuminata, the Tapering-leaved-Birch, is found on many of the mountains of Nepaul and in the great valley of that country, following the course of its rivers. B. Jacquemonti, *Spach.* The Paper Birch. Dr. J. Stewart gives the following names for it, vernacular in the N. W. Himalaya : Burj, phurz, shag, stap-ga, tag-pa and drowa. (This seems a synonym of B. bhojputra.)

BETULA CYLINDROSTACHYA, Cylindrical spiked Birch, and Betula nitida the Shining Birch, grow in Kumaon.—*Dr. Stewart, Eng. Cyc.*

BETULA BHOJPATRA, *Wall., Royle.*

Bhurjamu. Sans. Tel. | Bharjapatri chettu. Tel.

The Indian paper Birch, was found by Dr. Wallich on the alps of Gharwal and Kumaon. Dr. Stewart says the Birch is found abundantly in the Panjab Himalaya at 7,000 to 11,500 feet. It also occurs in Thibet and seems to Dr. Stewart to be all of one species. He says the wood is used for ploughs and bridges, poles for bearing, and in Ladak the striking part of a hockey club is made of it. Lt.-Col. Lake however says that the wood is unsound and worthless except for fuel. In Kangra, the bark is deemed sacred and is used for burial piles, and at Umrawatti in Kashmir, the pilgrims are clothed in it. It is used for roof dunnage, for covering umbrellas, for wrapping hookah tubes, for packing and as writing paper, and its twigs are made into bridges. Its inner bark was, till lately, used as paper, and is now brought to the plains for lining the tubes of hookahs, and the leaves or bark are used to cover the baskets of Ganges water sold by itinerant pilgrims.—*Dr. J. L. Stewart,* p. 198.—*Elliot's Fl. Andh., Eng. Cyc., Royle,* p. 383.—*Lt. Col. Lake.*

BHAI-BYA, Burm. ? In Amherst, a timber used for house-posts, commonly called White Jarool.—*Captain Dance.*

BHAN, Sindi. The Bhan or Poplar, used in Sind for rafters and turning work. It is to be found nowhere else in the Bombay Presidency. (Its Botanical name required.)

BHAN-BHWAY, Burm. In Tavoy, used for house posts ; like Sissoo. (*qu.* is this the Bhai Bya.)

BHA-TA-KA, Burm. In Tavoy, a wood used for common carpentry.—*Captain Dance.*

BHATKOORAL, Hind. A hard-grained, close wood, of a light grey color and not heavy. Rather scarce in the Santhal jungles from Raneebahal to Hasdiha about forty miles. Well adapted for timber bridges, where strength and toughness require to be combined with lightness.—*Calc. Engineer's Journal,* 1860.

BHA-WOON, Burm. A tree of Moulmein, converted into planks for building.—*Cal. Cat. Ex.* 1862.

BHOOT-THA.—A tree of Akyab. Not much in use. Grows to a large size, and is plentiful in Ramree and Sandoway districts.—*Cal. Cat. Ex.* 1862.

BHURKUNDA, Hind. ? A tree of Chota Nagpore. Soft, white timber.—*Cal. Cat. Ex.* 1862.

BHURSO, Hind. ? A tree of Chota Nagpore. Soft, white timber.—*Cal. Cat. Ex.* 1862.

BHYENG-TSENG, Burm. In Amherst, a close-grained, compact, grey wood, fit for general purposes, and seems to be exempt from attacks of insects.—*Captain Dance.*

BIGNONIA, a genus of plants, which are usually climbing shrubs with flowers mostly in terminal or axillary panicles. There are

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betwixt 60 or 70 known species and varieties. In floriculture, they grow in any situation or soil; but do not succeed well in pots owing to their rapid growth. The leaves of Bignonia chica yield a red colouring matter. The bark and capsules of B. indica are astringent, and used in tanning and dyeing. The pleasant tasted and fragrant flowers of B. chelonoides (suaveolens?) are described as being used as a cooling drink in fevers. The Karens often build their boats with the wood of a species of Bignonia, as the genus is defined by Roxburgh; and the timber which is sometimes large is frequently used in joinery.—*O'Shaughnessy, page* 489, *Eng. Cyc., page* 454 *Mason.*—See Spathodea.

BIGNONIA, *Species.*

Tha-thee. BURM.

A very large tree of Tavoy.—*Captain Dance.*

BIGNONIA, *Species.* (?)

Thuggainee. BURM.

A large tree of Tavoy, used in building.—*Captain Dance.*

BIGNONIA, *Species.*

Lainbha. BURM.

A middle-sized tree of Tavoy.—*Captain Dance.*

BIGNONIA, *Species.*

Than-day. BURM.

A light, loose-grained wood of British Burmah, not much used. Breaking weight 125 lbs. A cubic foot weighs lbs. 33 to 36. In a full grown tree on good soil, the average length of the trunk to the first branch is 30 feet, and average girth measured at 6 feet from the ground is 7 feet. It sells at 4 annas per cubic foot.—*Dr. Brandis.*

BIGNONIA, *Species.*

Kyoun-douk. BURM.

A wood of British Burmah, not used. A cubic foot weighs lbs. 23. In a full grown tree on good soil, the average length of the trunk to the first branch is 15 feet, and average girth, measured at 6 feet from the ground, is 2 feet.

BIGNONIA, *Species.*

Thau Thet Ngai. BURM.

A tree of Moulmein. Used in common purposes of building.—*Cal. Cat. Ex.* 1862.

BIGNONIA CORONARIA, a large tree with white flowers, very plentiful in the Tharawaddy and Pegu districts; it and *Bignonia spathoidea*, found throughout the province, and both afford from their inner bark material for the rope employed for local purposes.—*McClelland.*

BIGNONIA QUADRILOCULARIS, *Roxb.*

Spathodea Roxburghii, *Spreng.*
Heterophragma Roxburghii, *D. C.*

Warrus. MAHR.

This tree is found in the higher hilly places of the Concan, and the higher valleys of the Ghats, Circar mountains, Malabar Hill, Bombay, Elephanta, the Ghats, and is very common in Padshapore jungles in the Southern Mahratta country. Its flower is very beautiful. Wood is reckoned strong, tough, durable and serviceable, both for beams and for planks. It is much used as planking for carts. It is employed for many purposes by the natives?—*Roxb., Gibson.*

BIGNONIA SPATHOIDEA. This large tree is found throughout the Tenasserim Provinces. It is plentiful, and its inner bark affords a material for rope.—*McClelland.*

BIGNONIA SPATHACEA, *Linn. fil.* See Spathodea Rheedii, *Spreng.*; S. longifolia, *Vent.*

BIGNONIA STIPULATA, *Roxb.*

Spathodea stipulata, *Wall.*

Pha bhan of Akyab.
Ka mhoung ,,
Ma shoay of Moulmein.

Stipuled trumpet flower tree. A common flowering tree throughout Tenasserim, with a long twisted pod. It is common at Moulmein: and the flowers are often seen in bazars where they are sold for food. The tree enters the native materia medica, as affording a cure for psora. The tree of Moulmein is said to afford a strong wood for any ordinary purposes, and, in Akyab, the natives make a spirituous liquor from its bark, it is a small tree, and very plentiful, and wood used by natives for bows, &c.—*Cal. Cat. Ex.* 1862, *Dr. Mason.*

BIGNONIA TOMENTOSA. Under this name, Mr. R. Thompson, writing from Kumaon, describes a moderate sized tree, with a light yellow-coloured timber of a fine grain, hard, used for turnery and making into combs; and logs are obtainable 5 to 6 feet in length and 2 to 3 feet in girth.—*Mr. R. Thompson.*

BIGNONIA UNDULATA, *Roxb.*

Tecoma undulata, *G. Don.*

Wave-leaved Bignonia. ENG.
Bohira Reora. HIND.
Rukt Reora. MAHR.
Khew. SINDI.

A tree with drooping branches like the weeping willow. Dr. Gibson says it is rare in the Bombay forests, but is found in the northern part of Baglan and in Kandesh; it is more common in Sind, in some of the valleys of the Pubb Hills, and at Shah Bilawul; yet Voigt says it is abundant in one locality of Kandesh, and that it occurs in Guzerat. It is very common in Marwar and other parts of Rajwarra, and when covered in the month of

M[illegible] with its immense quantities of orange-coloured blossoms, it is a most splendid object and would be highly ornamental in compounds ; the wood is fine-grained and valuable, having a scent like the walnut leaf. The wood is reckoned very strong and durable, but from its size, applicable only to small purposes. —*Dr. Irvine, Gen. Med. Top., p.* 200, *Dr. Gibson.*

BIGNONIA XYLOCARPA, *Roxb.*

Tecoma xylocarpa, *G. Don.*

Ghan seng. Can.
Khurseng. Mahr.
Valencurni maram. Tam.
Vadenkurni maram. Tam.
Bairsingi of Khandesh.

This large tree has been noticed by Dr. Wight as growing in Coimbatore. It is found, also, though rare, in the Godavery forests, but grows on the Neilgherries, in the Thullghaut, Jowar jungles, hills about Nagotnah, jungles about Ratnagherry and on the Parr ghat. Dr. Gibson says it is common in the forests both inland and on the coast, and that it may be easily distinguished by its peculiar rough pods, two feet or more in length. The wood is never large, is very hard and good if ripe ; of a brownish yellow colour, rather close-grained, takes a good polish, and is used in turnery and in cabinet-making. It also affords an oil, obtained by a simple process of reverse distillation, and said to be of great efficacy in cutaneous affections. It is more useful for its oil than for its wood.—*Drs. Wight, Gibson, Captain Beddome.*

BIJION, Burm. In Amherst, a timber used for house posts, rafters, and the like purposes ; it is a heavy, compact, grey, close-grained wood.—*Captain Dance.*

BINTANGOR. A wood of the Malay Peninsula, in general use for planks, masts and spars, &c. It holds the same position in the Straits Settlements that the pine holds in America. It is in the greatest abundance around Singapore, and is exported in large quantities to the Mauritius, California, &c. In Singapore, "Bintaugor" wood is the most used especially in ship-building, serving for planks, masts, spars, &c.—*Exh. of* 1851.

BINTAGON ? A large Penang tree ; occasionally used for masts. (This is probably the Bintangor, *q. v.*)

BIS, Panjabi. The people in Kaghan confuse the willow, the Hippophiie, and tamarisk (Myricaria), and call all "bis."

BISCHOFIA ROEPERIANUS, *Blume, W. Ic.* 1880.

Andrachne trifoliata *Roxb.*, iii. 728.
Microelus Roeperianus *W. & A.*
Stylodiscus trifoliatus, *Bennett.*

A tree of the forests on the Western Coast, with a very hard, reddish, timber used for the masts and spars of small vessels.—*Beddome.*

BLACKBURNIA MONODELPHA, *Roxb.*

A large erect timber tree, a native of the mountainous parts of the Northern Circars. The wood is white, close-grained, and durable, and employed by the natives for a variety of purposes. It flowers at the beginning of the hot season.—*Roxb. Fl. Ind., vol. I, p.* 415.

BLACKBURNIA PIRMATA. A hard yellow wood of Norfolk Island, is much used for making household furniture.—*Keppel's Ind. Arch., vol. II, p.* 282.

BLACKWELLIA CEYLANICA, *Gardner.*

Blackwellia tetrandra, *W. Ic. A.* 1851.

Liang-gaha. Singh.

This is a common timber tree of Ceylon, which grows also in the Wynaad, the North Arcot jungles and in Cuddapah. Its wood is very strong and good for building purposes. —*Major Beddome, Mr. W. Fergusson.*

BLACKWELLIA TOMENTOSA, *Vent.*

Myouk-kyau. Burm.

Wood tough, of a light yellow colour, produce of British Burmah ; used for the teeth of harrows. A cubic foot weighs lbs. 56. In a full-grown tree on good soil the average length of the trunk to the first branch is 70 feet, and average girth measured at 6 feet from the ground is 6 feet. It sells at 12 annas per cubic foot.—*Dr. Brandis.*

BLACK WOOD, Eng.

Biti. Can.
Indian Blackwood. Eng.
Rosewood. ,,
Sisam. Guz.
Sisam. Hind.
Sit Sal. Hind.
Eru pottu. Tam.
Irugudu chettu. Tel.

Holtzapfel mentions that East Indian Blackwood is from the *Dalbergia latifolia*, called Blackwood tree by the English and Sit Sal by the natives of India, on the Malabar coast, where it grows to an immense size. The wood of the trunk and large branches is extensively used for making furniture ; it is heavy, sinking in water, close-grained, of a greenish black colour, with lighter coloured veins running in various directions, and takes a fine polish. The wood called, in Bombay, Seesum, Guz. and Hind., is however, probably the timber of different species of *Dalbergia* and possibly of *Diospyros* which grow in various parts of India. Bombay Blackwood is brought to Bombay from the Malabar Coast, and is largely used in the manufacture of household furniture. Every locality has a wood which is known by this name. Dr. McClelland mentions that the Bombay Blackwood is the timber of the Cassia Sumatrana. Dr. Cleghorn in his reports recognises under this name only the Dalbergia latifolia.—*Drs. Cleghorn McClelland, Mr. Faulkner, Holtzapfel.*

BLIGHIA. A genus of plants named after Captain William Bligh, R. N., master of the Bounty in the celebrated mutiny. It belongs to the natural order *Sapindaceæ*.

BLIGHIA SAPIDA, *Kön.*

Cupania sapida, *Cambess.*

The Akee tree has been introduced from Guinea into India. The fruit has the size and shape of a pear, of a red colour, and is much esteemed in Guinea and the West Indies. Wood said to be very hard and durable.

BODOKA, URIA ? In Ganjam and Gumsur, a timber tree, extreme height 35 feet, circumference 3 feet, and height from the ground to the intersection of the first branch 15 feet. A light, white wood, used for scabbards, bazar measures, boxes, bullock yokes, the poles of palanquins and tonjons and for toys. It is tolerably common.—*Captain Macdonald.*

BODON, HIND. ? A tree of Chota Nagpore, with a hard, reddish, grey timber.—*Cal. Cat. Ex.* 1862.

BOECHEE, HIND. ? A red-coloured wood, very hard and close-grained. The tree grows in the Santhal jungles from Raneebahal to Hasdiha or about forty miles, but is scarce. Seemingly fit for any building purposes if it can be grown to any sufficient size, which it never has a chance of doing in its present condition in the jungles. Too heavy for use generally with reference to timber bridges.—*Cal. Engineers' Journal, July* 1860.

BOHMERIA NERVOSA,

Ghantee. HIND.

Under these names Mr. R. Thompson notices a tree which grows in the deep well-wooded ravines of Kumaon where its wood is made into water pitchers and milk cans.—*Mr. R. Thompson.*

BOLUNGEE : BANSO, TEL. ? URIA ? Two bamboos of Ganjam and Gumsur, extreme height 25 feet, circumference 2 inches which are not common.—*Captain Macdonald.*

BOMBACEÆ. A group of plants, usually large trees, with broad deep-green leaves and flowers of considerable size, and containing some of the most majestic and beautiful trees that are known, but their wood is light and spongy ; the long cottony substance found within the fruit of the Cotton trees, is too short in the staple, and has too little cohesion between its fibres, to be manufactured into linen. The Baobab tree, *Adansonia*, is one of them, and is remarkable for the excessive thickness of its trunk as compared with its height. The genus *Eriodendron* is often defended by very large conical prickles, which do not fall off till they are exfoliated by the gradual distension of the trunk.—*Eng. Cyc., page* 553.

BOMBAX, *Species.*

That—Pan. BURM.

A tree of Moulmein, wood not known.—*Cal. Cat. Ex.* 1862.

BOMBAX, *Species.*

Burrul Mara. CAN. | Kanta Saeer. MAHR.

In Canara and Sunda, most common below, grows to a great size. Hollowed for canoes : planks sought after for light boxes.—*Dr. Gibson.* (*Qu.* is this B. malabaricum ?)

BOMBAX CEIBA. In South America and the West Indies, this large "cotton tree," is used for canoes. It is common at Canton, and the fleshy petals of the flowers are sometimes prepared as food.—*Riddell, Williams' Middle Kingdom, p.* 284.

BOMBAX INSIGNE, is a native of the Burman Empire, and is remarkable for its large red and very showy flowers.—*Eng. Cyc., p.* 554.

BOMBAX MALABARICUM, *D C.* ; *W. & A.*

Bombax heptaphyllum, *Cav.*
Bombax pentaphyllum.
Salmalia Malabarica, *Schott. & Endl.*
Gossampinus rubra, *Ham.*

Rakto-simal. BENG.
Rakto-shimal. ,,
Rakta-shimlu. ,,
La-i. BURM.
Lepan. ,,
Red Cotton Tree. ENG.
Rakta-simal. HIND.
Simbal ,,
Sair. MAHR.
Sairi. ,,
Kanta Sair. ,,
Mul-elavu. MALEAL.
Mulu-elavu. MALEAL.
Sum of Panjab.
Simbal. PER.
Shalmali. SANS.
Simal. ,,
Kattu imbal. SINGH.
Mal-ailas maram. TAM.
Mala elavu maram. ,,
Pula mula elavu. ,,
Buruga manu. TEL.
Mula-buraka manu. ,,
Bouro. URIA.

This large and stately tree grows in most parts of India ; it reaches a great size in the Bombay Presidency, where, both on the coast and inland, it is one of the most common trees, and there the planks are extensively used in making the light packing boxes used in the export of bulky goods from Bombay and other places ; also for fishermen's floats when the Adansonia is not at hand. It grows up to 3,500 and 6,000 feet in the Siwalik Hills, and Mr. R. Thompson describes it as abundant, and as a large and magnificent tree in all the moist valleys of the Sub-Himalaya. It is abundant in the plains of British Burmah, its wood is whitish, coarse-grained, weak and brittle and subject to the attacks of white ants, but its light and loose-grained wood is, there, used for coffins, for planks, doors and boxes. It improves and is rendered more durable by moisture, and in the Panjab is a favorite for well-curbs, water conduits, troughs and bridges, and in Kangra and Yusufzai it is made into scabbards. A cubic foot weighs lbs. 28. The cotton is used for stuffing cushions and pillows. In a full-grown tree on good soil the average length of the trunk to the first branch is 60 feet, and average girth measured at 6 feet from the ground is 1·5 feet. It yields the *Moochee-ras* resin, and its roots constitute the *Safed Moosli* of the bazars, which, powdered, forms a thick mucilage with cold water, and answers admirably as a nutritious demulcent for convalescent persons.—*Drs. Wight, Brandis, Gibson, O'Shaughnessy, J. L. Stewart, Capt. Beddome, Mr. R. Thompson.*

BOMLE MARA, CAN. ? Ind. Binteki? Dr. Gibson describes this as occurring below and near the ghats only in Canara and Sunda. Wood very servicable for planks, and seems to be used only for this purpose.—*Dr. Gibson.*

BONG LONG THA, BURM. A timber tree of Amherst, Tavoy and Mergui Archipelago, of maximum girth 3 cubits, maximum length 22 feet, and said to be abundant. Found all over the provinces, has not been easily obtained in Moulmein. When seasoned, floats in water. It is a durable yet light wood with a very straight grain; used for every purpose by the Burmese, and much recommended for helves.—*Captain Dance.*

BONO KONIAREE, TEL. ? URIA ? Extreme height 50 feet. Circumference 3 feet. Height from ground to the intersection of the first branch, 10 feet. Used for planks, boxes, and walking sticks. It is scarce.—*Captain Macdonald.*

BON SONE, BURM. ? A tree of Moulmein. Wood used for house-building purposes.—*Cal. Cat. Ex.* 1862.

BOOK THA, BURM. ? A tree of Amherst, Tavoy and Mergui, of maximum girth 1½ to 2 cubits, and maximum length 11 feet. Scarce but found on the sea coast from Amherst to Mergui. When seasoned it floats in water. It is used by the Burmese for helves, but rots quickly, and therefore not recommended.—*Captain Dance.*

BORASSUS, *Species?* Dr. Mason says that the Tenasserim Provinces yield an indigenous palm, which the natives call the wild palmyra. It has the fruit of the palmyra, but the leaf differs from it sufficiently to constitute it another species. Wood not known.—*Dr. Mason's Tenasserim.*

BORASSUS FLABELLIFORMIS, *Linn; Rheede; Roxb.*

Lontarus domestica, *Rumph.*

The tree is named

Tal-gach'h. BENG.	Talgaha. SINGH.
Palmyra Tree. ENG.	Panam maram. TAM.
Brab Tree. ,,	Tatti chettu. TEL.
Tar ka jhar. HIND.	Tari. ,,
Kontal. JAV.	Penti-tati chettu. ,,
Lontar. MALAY.	Karata-lamu. ,,
Pana. MALEAL.	Potu tadi. ,,
Tala. SANS.	

The wood is called

Palmyra wood. ENG.	Panam maram kattai TAM.
Porcupine wood. ,,	Tatti chettu karra. TEL.
Tar ke jhar ki lakri. HIND.	

The palm wine or toddy is known as

Tari. DUK.	Tuwak. MALAY.
Palmyra Toddy. ENG.	Pannang kallu. TEL.
Nera. MALAY.	Tatti kullu. ,,

The sugar is

Tar-ka-gur. DUK.	Pannam vellam. TAM.
Jaggery of Palmyra ENG.	Tati bellam. TEL.

The edible part is called

Geunghul. DUK.	Tala. SANS.
Young Palmyra Plant. ENG.	Pannam kelangu. TEL.
	Tati-gadda. TEL.

The fibres of the palmyra leaf are called

Pannam Nar. TAM.	Tati nara. TEL.

Its fruit is the

Tar phal. DUK.	Tata. SANS.
Palmyra Fruit. ENG.	Pannam pallum. TAM.
Bua Lontar. MALEAL.	Tati pandu. TEL.

To Eastern nations, the Palmyra tree is only inferior in usefulness to the date tree and the cocoanut palm. It grows to a height of 70 feet with a circumference of 5½ feet at bottom and 2½ at top. The Tamil poem, of Ceylon, the Tala Vilásam, enumerates 801 purposes to which the Palmyra may be applied. The trees have to attain a considerable age before they become fit for timber, as their wood becomes harder and blacker by age, and the harder and blacker it is the better. The wood, near the circumference of old trees, is very hard, black, heavy and durable. A cubic foot weighs 65 lbs., and it is calculated to last 80 years. In some parts of the Ceylon and Madras coasts, this tree is very abundant, especially in sandy tracts near the sea, though it is to be seen in most parts of India, and occasionally so far north as 30°. It is used chiefly for rafters, joists and reepers. When of good age, the timber is very valuable for this purpose, the trunk is split into 4 for rafters, into 8 for reepers; these are dressed with an adze. Those of the Jaffna palmyras are famous, and were largely exported in former times. From the structure of the wood it splits easily in the direction of its length, yet supports a greater cross strain than any other wood. Old black palmyra wood, was, next to the Casuarina, the strongest wood that Dr. Wight tried, one specimen bore upwards of 700 lbs., and though he found some very bad, five of them gave an average of 648 lbs. Mr. Rohde remarks that it is the strongest wood he tried, retaining for a length of time the position it assumed when loaded, without increase of deflexion. He procured it of excellent quality in the Circars. The thickness of rafters when trimmed up rarely exceeds two inches four feet from the ground, and one inch at twenty or twenty-four feet from it. The

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fr[illegible] and the fusiform roots of the young trees are used as articles of food by the poorer classes. The leaves are used for thatching and coarse fibre. Jaggery and toddy are extracted from the tree, the former in Vizianagrum and Rajahmundry, being extensively used in the manufacture of sugar. · Very neat baskets of Palmyra leaf are made in Tinnevelly. Some clean but brittle fibres were exhibited at the Madras Exhibition of 1855, by the Tinnevelly, Madura and Travancore local committees; and well twisted rope accompanied most of the samples, but the material is said to be stiff, brittle, and liable to rot when wet. The substance did not appear to have undergone any preparation, and it contained so much woody fibre that it is questionable whether it would ever be suited for manufacturing purposes. Its chief uses are for securing thatch and tying bamboos, in building native huts. The dried leaves of this plant are likewise used for writing upon with an iron style, also in making fans, and light baskets for irrigation. Next to *Caryota urens*, it is the largest palm on the Madras coast, and it seems to thrive equally well in all soils and situations. The seeds when young are eaten by the natives, being jelly-like and palatable. The tree, during the first part of the season, yields a pretty large quantity of toddy or palm wine. This is either drank fresh drawn from the tree, or boiled down into a coarse kind of syrup called jaggery, or it is fermented for distillation. Some leaves are formed into large fans, called vissari in Tamil. The fibres of the petiole of the leaves (*Palmyra nar*) are employed on the Madras side for making twine and small rope. They are about two feet in length and strong. Trees tapped for toddy do not form wood. The large carpenter beetle "Xylocopa" delights in boring this hard wood, though the *Cumboo* is still more attractive to it. Small canoes are formed of this tree, two of which lashed to a couple of spars form the usual mode of crossing lakes and rivers in the Circars—the root forms the head of the canoe, the smaller end is either elevated out of water by the form, or some six inches of the pith is left at that end. As this decays, a lump of clay supplies its place. Formerly sea-going vessels were planked with this wood, but the iron fastenings were soon destroyed. Iron nails soon rust in this wood. Boats planked with it were lately common on the Godavery, being built probably where sawyers are not procurable. The peculiar structure of the wood of the palms deserves attention, it appears formed of a series of hard stiff longitudinal fibres not interlaced or twisted but crossed at considerable intervals at various angles by similar fibres which proceed from the soft heart of the tree, to the outer part, probably to the leaf stem—a radial section of palmyra rafter shows this, the interstices are filled up with pith, the proportion of which increases with the distance from the outer part. The wood is much used in house-building, for rafters, joists and reapers. In England for veneers and inlaying. It is exported in large quantities from Ceylon, where it is used for rafters, pillars, and posts of native houses. In the sandy parts of Jaffna in Ceylon, a hollow palmyra is inserted to form a well. The dark outside wood of very old trees, is used to some extent in Europe for umbrella handles, walking canes, paper rulers, fancy boxes, wafer stamps and other articles. The timber of the female tree is the hardest and best, and that of the male tree is never used, unless the tree be very old. It is too heavy to make ships of. At certain seasons of the year, thousands are employed in felling and dressing it. Each tree has from twenty-five to forty fresh green leaves upon it at a time, of which the natives cut off twelve or fifteen annually to be employed as above described for thatch, fences, manure, mats, and mat baskets, bags, irrigation baskets, winnows, hats, caps, fans, umbrellas, &c.; books and olay, tatakoo or puttay, for writing on.* In the Bombay side, it is common only on the Northern Konkan, where it is in some parts so abundant, that it might be termed a forest. It is a rare tree in the southern jungles of the Bombay Presidency. The wood, when protected from moisture, is very durable, and may be used with advantage for terraces, &c., when the upper covering is complete. It is also used for canoes. Few of the trees of the South and East of Asia are so extensively used and so valuable to the people, perhaps in many respects it is only inferior to the bamboo: but with its toddy, its jaggery. and its seeds, its usefulness to man is greater. The germinating seeds (Ponatoo, *Singh.*) are boiled and eaten in Ceylon as a vegetable.—*Seeman, Simmonds, Drs. Wight, Cleghorn, Gibson, Mr. Rohde.*

BORO-KOLEE, Tel. Uria. This Gumsoor tree, supposed to be a species of Zizyphus, has an extreme height of 30 feet, circumference 3 feet, height from ground to the intersection of the first branch 8 feet. Planks, doors, boxes, matchlock stocks, and palanquins are made of this wood. The leaves pounded and mixed with turmeric are supposed to be efficacious in curing rheumatism. The seeds are also used medicinally in diseases of infants. The tree yields a lac. The large trees are scarce, but young trees very common.—*Captain Macdonald.*

BOSWELLIA. A genus of plants, of which the Boswellia glabra, Boswellia serrata,

GSL

([illegible] of B. thurifera) occur in India, they yield a fragrant gum resin, called Luban, *Arab.*; also Kundur, *Arab.*, supposed to be the Λιβανος of Theophrastus, and the Thurea virgo of the Romans. This seems to be the olibanum and identical with the frankincense that was used by the ancients in their religious ceremonies. Boswellia glabra, *Roxb.*, (Canarium balsamiferum, *Willde*,) grows throughout India, is said to yield the odorifirous gum called "Salai" or "Salhe," or Googul. B. serrata, *Roxb.*, of the Condapully hills, is known as Luban, but the woods are worthless. —*Eng. Cyc.*, *Major Beddome*, *Mr. R. Thompson*, *Dr. J. L. Stewart.*

BOSWELLIA GLABRA, *Roxb.*; *W. & A.*

Canarium balsamiferum, *Willd.*

Salai.	HIND.	Andugu chettu.	TEL.
Kunthrekum.	MALEAL.	Gugalapu chettu.	,,
Moroeda.	TAM.	Guggilapu chettu	,,
Kundrikam.	,,		

A small tree; flowers small, white, with a red nectary, yields the gum salai. Its wood is of no value. Mr. P. R. Thompson says that it grows also in Kumaon.

BOSWELLIA THURIFERA, *Roxb.*

Boswellia serrata, *Stackh.*

Kundur; Zuchir.	AR.	Awul kandur.	HIND. PERS.
Luban.	BENG. DUK.	Dup-salai.	,,
	HIND. PERS.	Ganda Baroza.	,,
Salai?	,,		

A tall tree with pinnate leaves, which yields the olibanum. It grows on the hills of the Dekhan, the Konkan jungles, above Rajoor, in the hill of Shendoor, in the Belgaum collectorate, in Bundlekund, it is a native of the mountainous tracts of Central India, and very common in the Shahabad country. Dr. Hooker remarks of this plant, that, in ascending from Beleuppee in Behar to the height of 1,360 feet, he came upon a small forest of the Indian Olibanum, *Boswellia thurifera*, conspicuous from its pale bark and spreading curved branches, leafy at their tips; its general appearance being a good deal like that of the mountain ash. The gum, celebrated throughout the East, was flowing abundantly from the trunk, very fragrant and transparent.—The *Salai* or *Salar* tree, *Boswellia thurifera*, remarks Dr. Irvine, is plentiful in the Ajmeer hills: the gunda birosa is the prepared gum resin of this tree, and is similar in appearance and qualities to Venice turpentine. It is brought from Mewar, Haraotee and the Shekhawattee hills: and is considered stimulating: an oil is distilled from it, said to cure gonorrhœa. It is used also in ointments: much used in painting and by the lakheri, one maund costing twelve rupees. From the Shahabad country, Dr. O'Shaughnessy obtained fine specimens of the resinous products there called *sale gond or sale lassa*. At Chandalgur it is termed *gunda biroza*, and in the dry state *sukha biroza*. Dr. Hamilton however thought the English olibanum to be the produce of an Amyris, partly because he could not find that the "sale" resin was used as incense by the hindoos. The B. glabra and B. thurifera both furnish the male frankincense of Dioscorides. The olibanum resin occurs in reddish or pale yellow tears, oval, oblong and obtuse, sometimes in dense, opaque brittle masses. The "gunda barosa" of the bazars is soft, ductile, opaque, greenish and white. The odour is balsamic and resinous, especially while the resin is burning; the flavour balsamic, and rather bitter. The powder is citron yellow. It is frequently adulterated by dammer, sandarach, and other cheaper resins; when chewed the hard variety softens, and dissolves partially in the saliva, which it renders white and emulsive.—*O'Shaughnessy*, *Hooker*, *Him. Jour.*, *p.* 29, *Med. Top. of Ajmeer.*

BOTANY BAY HE OAK. The wood of this tree is used in making brush backs for veneers and in the manufacture of Tunbridge ware. (The She Oak is Casuarina quadrivalvis, may this also not be a species of Casuarina ?)

BOWSA, HIND. ? A tree of Chota Nagpore. Soft, white timber.—*Cal. Cat. Ex.* 1862.

BOX WOOD.

Palm-hout.	DUT.	Busso.	IT.
Buis.	FR.	Bosso.	,,
Buchsbaum.	GER.	Bossolo.	,,

This is a valuable wood of a yellowish colour, close-grained, very hard and heavy, it cuts better than any other wood, and is susceptible of a very fine polish. It is chiefly used by engravers, turners, mathematical, and musical instrument makers, and also in the manufacture of combs, knife-handles, button-moulds, &c. It grows in the South of Europe and West of Asia. A species of Boxwood has been introduced into Britain from the Himalaya; it is the Buxus emarginatus of Dr. Wallich. This is found of considerable size and thickness, and the wood appears as good and compact as that of the box-wood in use in Europe. On actual comparison the Himalayan box-wood is found to be softer than the common kinds, but is like them in other respects, and wood-cuts have been engraved upon it.—*Faulkner*, *Royle*, *Illust. Himal. Bot.*, *p.* 327, *see* Buxus.

BRANTEY ? In Penang, a light brown-coloured inferior, weak wood; used for building.

BRAS-BRAS. A tree of the Malay Peninsula called by Europeans the Glam tree, furnishes a paper-like bark much used in caulking the seams of vessels. Wood used as floats for fishing nets.

BRIEDELIA. This genus of plants, contains useful trees, but B. montana, B. retusa, B. spinosa, are regarded as identical.

BRIEDELIA, *Species.*

Undooroo Wood. ANG-TEL. | Undooroo Karra. TEL.

A wood of the Northern Circars.

BRIEDELIA LANCEÆFOLIA, *Roxb.*

A tree of considerable size, a native of Bengal.

BRIEDELIA MONTANA.

Bridelia spinosa, *Roxb.* | Bridelia retusa, *Spr.*, 279.

Goonjun Mara. CAN.
Asanna. MAHR.
Katu-kata-kala. SINGH.

Found in Canara, and common in Dandelee, where it reaches a great size. Many fine logs have been exported by merchants since the cutting of teak trees was interdicted. Hardly inferior to teak and stands water equally well. If it has not been already tried for naval purposes, it seems well worthy a trial.—*Dr. Gibson, Major Beddome, Mr. Fergusson.*

BRIEDELIA MOONII, *Thw.*

Ma-pat-kata-kala. SINGH.

A common Ceylon tree up to 2,000 feet, produces useful timber for building purposes, said to be durable under ground.—*Thwaites.*

BRIEDELIA SPINOSA, *Willde.; Roxb.*

Cluytia spinosa, *Roxb.*

Asanna. CAN. MAHR.
Asun. CAN. DUK. MAHR.
Sun? DUK.
Mullu vangay. MALEAL.
Katu kosta koola. SINGH.
Mulla vengay maram. TAM.
Kora manu. TEL.
Kora man. TEL.
Duria madde? TEL.

This large tree is a native of several parts of Southern India. It is not uncommon in the alpine jungles of Coimbatore where it attains a considerable size. It is found in the Godavery forests, where its wood is esteemed as very strong and good. It is rather a common tree in the Bombay forests, both coast and inland. The wood is strong and tough and stands the action of water well: hence it is often used for the frames of wells, whereon the superstructure of masonry is erected. It is also used as beams for houses. This wood in Dr. Gibson's opinion, deserves to be more extensively known than it is. Cattle eat the leaves voraciously. They are said to destroy worms in their bowels.—*Roxb., Drs. Gibson, O'Shaughnessy, Wight, Cleghorn, Capt. Beddome, Flor. Andh.*

BROUSSONETIA PAPYRIFERA, *Vent.*

Morus papyrifera, *Linn.* | Papyrius Japonica, *Lam.*

Kilia of Celebes.
Paper Mulberry. ENG.
Gluga. JAV.

This shrub has long been famous for its fibrous bark, which is made into a kind of cloth as well as into paper. It is a native of the isles of the Southern Ocean, as well as of China and of Japan, but has been introduced into the Madras Gardens. In Taiti, or Otaheite, and other islands, they make cloth of its bark; and it is said that the finest and whitest cloth and mantles worn by the principal people at Otaheite and in the Sandwich Islands were made of the bark of this shrub, and this when dyed red takes a good colour. It is from the inner bark of this plant that the Japanese and the Chinese manufacture a kind of paper. It forms a small tree with soft brittle woolly branches, and large hairy rough leaves, either heart-shaped and undivided, or cut into deep irregular lobes.

BRUGUIERA PARVIFLORA, *W. & A.*

Rhizophora parviflora, *Roxb.*
„ cylindrica, *Roxb. H. B.*

Uravada. TEL. | Varavada. TEL.

This mangrove grows in the Moluccas, Sumatra, Cochin-China, in the Malay Islands, in both the Indian peninsulas, the Khassia mountains, Nepaul, Orissa, Jellasore. Character of wood not known: Berries dye black.—*Voigt, Elliot, Fl. Andhrica.*

BRUGUIERA RHEEDII, *L'Herit.*

Bruguiera gymnorrhiza, *Lam.*
Rhizophora gymnorrhiza, *Linn.*

Kankra. BENG. | Mangrove. ENG.

This species of mangrove grows in Cochin-China, the Moluccas, Java, Tenasserim, Penang, the Sunderbuns and in Malabar, and is most abundant along the shores. The tree is easily distinguished from its associates, for it drops no roots from its branches, but the trunk is divided into numerous roots for half its height, like a small bamboo pavilion. The wood is yellowish, and hard and durable.—*Voigt, Mason.*

BUCHANANIA ANGUSTIFOLIA, *Roxb.*

Spondias simplicifolia, *Rottl.*
Mangifera axillaris, *Lam.*
Cambessedia, *Kunth.*

This tree grows in the hills of the south of India, in the Adjunta jungles and is seen about Rangoon. Wood not known.—*Voigt, McClelland.*

BUCHANANIA INTERMEDIA, *Wight's Icones, t. p. 81.*

Sara. TEL. | Chara. TEL.

Grows in the Nagari and Cuddapah Hills, and has a tough and strong wood.—*Beddome.*

BUCHANANIA LATIFOLIA, *Roxb.; W. & A.*

Spondias elliptica, *Rottl.*
Chirongia sapida, *Buch.*

Piyala? BENG.
Thit-asi? BURM.
Lumbo. „
Noss kool. CAN.
Pia-Sal. GUZ.
Pujal? HIND.

P[illegible]cronji.	HIND.	Chara-chettu,	TEL.
Chironji,	,,	Chara pappu ,,	,,
Charoli,	,,	Charu-mamidi.	,,
[illegible]	MAHR.	China moralli.	,,
Chara.	SANS.	Jaru-mamidi.	,,
Kaat mango.	TAM.	Sara-puppoo.	,,
Moræda.	,,	Charo. URIA.	,,

This straight-growing handsome forest tree, with fragrant flowers, is, in the Bombay Presidency, found more inland than in the coast jungles. In Canara and Sunda, it is most frequent about the ghats, particularly north of Dandellee, and Dr. Gibson describes the wood as rather strong and tough, but seldom found squaring about four inches, or of thickness more than sufficient for posts. The tree abounds in Mysore and Cuddapah, and occurs in Cuttack where its useful wood is worked up generally into furniture, house doors and windows, presses, tables, &c. It requires to be polished, otherwise it stains, of a burnt sienna colour, any cloth brought into contact with it. In Ganjam and Gumsur it has an extreme height of 36 feet and a circumference of 8 feet, and the height from the ground to the intersection of the first branch is 15 feet. There, bullock yokes are sometimes made of the wood, though it is chiefly used for firewood. It grows in Ajmeer. Mr. R. Thompson says it is very abundant along the dry clay and sand formations of Kumaon and Ghurwal, but its timber there is not durable, and is used only as temporary fences or as floats for rafts; and Dr. J. L. Stewart writing from the Panjab says its wood is worthless. From these accounts, it would seem to be, in peninsular India, a rather hard, tough, strong and durable wood; but Dr. Brandis tells us that in Burmah it is a soft, light wood and not used: that a cubic foot weighs lbs. 36, that in a full-grown tree on good soil the average length of the trunk is 20 feet, and average girth measured at 6 feet from the ground is 6 feet, and that it sells at 4 annas per cubic foot.

It bears fruit about the size of a small cherry, in long bunches, colour of a darkish purple: the kernels, or seeds, which are covered with a double shell, after being prepared by the natives, are sold in the bazars of India, four or five pounds, for a rupee; they possess the flavour of almonds, and are used as such by the native confectioners, the fruit is agreeable, and the seed, (called Chironji, *Hind.* Charapuppoo, *Tam.*,) has a very pleasant rich flavour. The method of preparing them by the Bheels is this: the fruit when ripe in May is gathered, then soaked in water to soften the outer pulp, when it is washed and rubbed off by the hands: the little nut is then dried in the sun, and afterwards broken between a common chuckee or stone hand-mill, such as is used for grinding wheat: the kernels are then sifted and winnowed. This kernel is much used in native confectionary, for which purpose it is bought. It is roasted and eaten by the brahmins with milk, is considered a great delicacy and promotes fatness. It abounds in a straw-coloured, sweet tasted and limpid oil which is seldom extracted though a very fine oil might be expressed from the seed.—*Madras Exhibition, Dr. Irvine, Eng. Cyc., Drs. Gibson, Brandis, J. L. Stewart, Mason, Cal. Cat. of* 1862, *Voigt, Useful Plants, Flor. Andh., Mr. R. Thompson.*

BUCHANANIA VARIEGATA?

Kachnar. HIND.

A tree of Chota Nagpore, with hard, white yellow timber.—*Cal. Cat. Ex.* 1862.

BUCKLALL. HIND.? A close straight-grained wood, light, tough and strong; grows in the Santhal jungles from Raneebahal to Hasdiha or about forty miles, but not very plentiful. Is suitable for timber bridges.—*Cal. Engineer's Journal*, 1860.

BUCKLANDIA, *Species.*

A magnificent tree of the Sikkim Himalayas. One seen by Dr. Hooker had a trunk twenty-one feet seven inches in girth at 5 feet from the ground. Its wood is brown, but, he adds, not valuable as timber.—*Dr. Hooker.*

BUCKLANDIA POPULNEA, *R. Brown.*

A large tree of the Khassia mountains from Cherra Poonjee to Sarureem.—*Voigt.*

BUKKURCHA, a tree common in the valleys of large rivers in Kumaon and Ghurwal with a light durable wood.—*Mr. R. Thompson.*

BUMBOO? TAM.? A Palghat wood, of a yellow colour, from a large tree. It is used for building and for furniture.—*Col. Frith.*

BUNHO. A Penang wood, from a large tree; occasionally used for building.—*Col. Frith.*

BURDUR—? A tree of Cuttack, an excellent wood for carriage poles, shafts, and wheels, and in all coach-builders' work.—*Cal. Cat. Ex.* 1862.

BURHAL? A light yellowish-coloured wood, not strong. Plentiful in the Santhal jungles from Sooree to Hasdiha; or about sixty miles. Used for doors, venetians, furniture, &c., by the natives.—*Cal. Engineers' Journal*, 1860.

BURMAH. The woods of Burmah, Pegu, and the Tenasserim Provinces southwards to Amherst, Tavoy and Mergui, have received the attention both of scientific and practical men. Amongst these, may be named Drs. Wallich, Falconer, McClelland, Mason and Brandis, of Colonel Simpson and Captain Dance of the Artillery, and Major Benson of the Madras Infantry. In all that tract, and

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perhaps also up to the southern mountains of the valley of Assam, the same trees,—furnishing timber, ornamental and fancy woods, seem frequently to recur. At the Great Exhibition of 1851, ninety specimens of woods were exhibited from Province Amherst : Captain Dance sent to the Madras Military Board, notes on 114 trees from Amherst, Tavoy and Mergui ; and of Pegu or British Burmah, Dr. McClelland noticed.

White	woods..85	species,	soft and useless, fit only for fuel.
Red colored	,, ..25	,,	suited for timber, ornamental and fancy woods.
Yellow	,, .. 3	,,	hard and fine grained, suited to fancy purposes.
Dark-brown	,, ..12	,,	suited for house and ship-building.
Black	,, .. 4	,,	all valuable for strength and hardness.
Light brown	,, .. 7	,,	embracing all the timbers of most value in these Provinces.

Dr. Mason, in his Tenasserim and again in his Burmah, gave valuable remarks on 63 timber trees. Dr. Wallich notices 89 trees of Tavoy, and Mr. Blundell sent 69 woods from the same place, to the Great Exhibition of 1851. Recently, the Calcutta Central Committee for the London Exhibition of 1862, sent valuable collections from those regions, 112 woods of British Burmah from Dr. Brandis—60 specimens of woods from Assam : 44 from Akyab : and 86 from Moulmein. Notices of all these will be found arranged alphabetically ; but, it may be necessary to mention, that, in all that country, when the practical botanist shall have leisure further to identify trees, now undetermined and which as yet are only known by their vernacular names, and shall have again brought together species which, from some local peculiarity of structure or appearance, have been deemed worthy of a distinct specific name, the seeming numbers of wood and timber trees of those regions will probably be brought within a hundred and fifty species, many of which, too, are found, in more or less abundance, in other parts of South-eastern Asia. Dr. Brandis' list, repeated in the Calcutta Catalogue for the Exhibition of 1862, contained the following series of woods of British Burmah, which, as being the most recent, is here given, in the mere names, as the more detailed notices will be found in the alphabetical arrangement :—

Acacia catechu, L. var. a
,, catechu, L. var. b
Albizzia, sp.
,, stipulata, Boiv.
,, elata.
Artocarpus, sp.
Artocarpus mollis, Wall.
,, lacoocha, Roxb.
Bauhinia Malabarica, Roxb.
,, racemosa, Lam.
Bamau, *Burm.*
Berrya mollis, Wall.
Bignonia, sp.
,, ,,
Blackwellia tomentosa, Vent.
Bombax Malabaricum, D. C.
Buchanania latifolia.
Calophyllum, sp.

Calophyllum, sp.
Carallia integerrima, D. C.
Careya arborea, Roxb. var. a (dark)
Careya arborea, Roxb. var. b (light)
Cassia, sp.
,, florida.
Cathartocarpus fistula, L.
Cedrela toona, Roxb.
Chicrassia tabularis, Juss ?
Conocarpus acuminatus.
Cordia myxa, L.
Dalbergia, sp.
Dillenia aurea, Sm.
,, pentagyna, Roxb.
,, speciosa, Thunb.
Diospyros, sp.

Diospyros, sp.
Dipterocarpus, sp.
,, sp.
Dipterocarpus alata, Wall.
,, grandiflora, Wall.
Duabanga grandiflora, Wall.
Eriolœna, sp.
,, sp. ?
Eugenia, sp.
,, obtusifolia, Roxb.
,, cerasoides, Roxb.
,, caryophyllæfolia, Roxb.
Ficus lanceolata, Roxb.
Garcinia cowa, Roxb.
Gardenia lucida, Roxb.
Garuga pinnata, Roxb.
Gmelina arborea, Roxb.
Grewia microcos, L.
Henslowia paniculata Migu.
Heritiera, sp.
Hopea, sp.
,, odorata, Roxb.
,, suava.
Inga xylocarpa, L.
Katsitka, *Burm.*
Koo-than, *Burm.*
Lagerstrœmia, sp.
Lagerstrœmia pubescens, Wall.
Lagerstrœmia reginæ, Roxb. var. a, wood, light red.
Lagerstrœmia reginæ, var. b, wood, dark-red.
Lagerstrœmia parviflora, Wall.
Leguminosæ. Thit-pouk, *Burm.*
,, Pouk-then-myek kouk, *Burm.*
Melanorrhœa usitatissima, Wall.
Meliusa velutina, Hf. and Th.
Mesua ferrea, L.
Moondein, *Burm.*
Nattamin, *Burm.*

Nauclea, sp.
,, cordifolia, Roxb.
,, diversifolia, Wall.
,, cadamba, Wall.
,, undulata, Wall.
,, parviflora, Roxb.
Odina wodier.
Palawa, *Burm.*
Phyllanthus, sp.
Pierardia sapida.
Pinus Massoniana, Lamb.
,, Khasyana.
Podocarpus neriifolia.
Pongamia, sp.
,, sp.
Pouk-then-myek kouk.
Premna pyramidata, Wall.
Pterocarpus dalbergioides.
Quercus semiserrata, Roxb.
Rottlera, sp.
Salix leptosperma, Roxb.
Sapindus, sp.
Schleichera trijuga, Willd.
Shorea obtusa, Wall.
Spathodea, sp.
,, stipulata, Wall.
,, Rheedii, Spreng.
Sterculia, sp.
,, fœtida, L.
,, suava, Wall.
Stereospermum chelonoides.
Strychnos nux vomica, L.
Terminalia bellerica, Roxb.
,, chebula, Retz.
,, bialata, Roxb.
,, macrocarpa.
Tectona grandis, L.
Thitnee, *Burm.*
Thit pouk, *Burm.*
Toun-kat-seet.
Vitex, sp.
,, leucoxylon, Roxb.
Wrightia, sp.
Xylocarpus granatum, Koen.

The Burmese and scientific names are as under :—

Anambo—Henslowia paniculata, *Migu.*
Bamau—Unknown.
Bambouay—Careya arborea, *Roxb.*
Bingah—Nauclea diversifolia, *Wall.*
Bjoo ben—Dillenia pentagyna, *Roxb.*
Boay gyin—Bauhinia malabarica, *Roxb.*
Boo mayza—Albizzia stipulata, *Boiv.*
Chloctni—Eriolæna, *species.*
Dwa nee—Eriolœna, *species.*
Eng—Dipterocarpus grandiflora, *Wall.*
Engyin—Hopea suava, *Wall.*
Gangau—Mesua ferrea, *Linn.*
Gjoot—Diospyros, *species.*
Gnoo gyee—Cassia, *species.*
Gnoo showoay—Cathartocarpus fistula, *Linn.*
Gyo—Schleichera trijuga, *Willde.*
Hnau—Nauclea cordifolia, *Roxb.*
Hpa-lan—Bauhinia racemosa, *Lam.*
Htein—Nauclea parviflora, *Roxb.*
Htein-ga-lah—Nauclea, *species.*
Htein thay—Nauclea, *species.*
Htoukgyan—Terminalia macrocarpa.
Htouk sha—Vitex leucoxylon, *Roxb.*
Kanazoe—Pierardia sapida.
Kanyin—Dipterocarpus alata, *Wall.*
Kalsitka—Unknown.
Kaung mhoo—Dipterocarpus, *species.*
Kha-boung—Strychnos nux vomica, *L.*
Khyong-yook—Garuga pinnata, *Roxb.*
Kjeyoh—Vitex, *species.*
Kokoh—Albizzia, *species.*
Koothan—Unknown.
Kuyon—Tectona grandis, *Linn.*
Kyan thoo—Dipterocarpus, *species.*
Kyoon nalin—Premna pyramidata, *Wall.*
Kyoun douk—Bignonia, *species.*
Laizah—Lagerstrœmia pubescens, *Wall.*
Lein—Terminalia bi-alata, *Roxb.*
Lepan—Bombax malabaricum, *DeC.*
Let khop—Sterculea fœtida, *Linn.*
Lumboo—Buchanania latifolia.

Man[illegible]—Carallia integerrima, *DeCandolle.*
Mao[illegible]oon—Nauclea cadamba, *Wall.*
Mayza lee—Cassia florida.
Moma kha—Salix tetrasperma, *Roxb.*
Moondein—Unknown.
Mya ya—Grewia microcos, *Linn.*
Myouk gnau—Duabanga grandiflora, *Wall.*
Myouk kyau—Blackwellia tomentosa, *Vent.*
Myouk louk—Artocarpus lacoocha, *Roxb.*
Nabhay—Odina wodier.
Nasha—Phyllanthus, *species*,
Nattamin—Unknown.
Ouk khyin za—Diospyros, *species.*
Padouk—Pterocarpus dalbergioides.
Paet Than—Spathodea stipulata, *Wall.*
Palawah—Unknown.
Pangah—Terminalia chebula, Retz.
Pet woon—Berrya mollis, *Wall.*
Pinlay Kanazoe—Heritiera, *species.*
Pin-lay-oong—Xylocarpus granatum Kœn.
Poon yet—Calophyllum, *species.*
Pouk then ma myek kyouk—One of the Leguminosæ.
Pyimma—Lagerstrœmia reginæ, *Roxb.*
Pynkadoe—Inga xylocarpa, *L.*
Seet—Albizzia elata.
Sha—Acacia catechu.
Thaboot kyee—Meliusa velutina. *H. f. and Th.*
Thabyeh gah—Eugenia caryophyllæfolia, *Roxb.*
Thabyehgjo—Eugenia obtusifolia, *Roxb.*
Thabyeh gyin—Eugenia cerasoides, *Roxb.*
Thabyeh thapan—Eugenia, *species.*
Thabyoo—Dillenia speciosa, *Th.*
Tha khoot ma—Spathodea Rheedii, *Spr.*
Thakooppoo—Stereospermum chelonoides.
Than-day—Bignonia, *species.*
Thanat—Cordia myxa. *Linn.*
Thapon—Ficus lanceolata, *Roxb.*
Tha-ra-phee—Calophyllum, *species.*
Theet min—Podocarpus neriifolia.
Theya—Shorea obtusa, *Wall.*
Thingadoe—Hopea, *species.*
Thingan—Hopea odorata, *Roxb.*
Thin win—Pongamia, *species.*
Thit ka doe—Cedrela toona, *Roxb.*
Thit kyah—Quercus semiserrata, *Roxb.*
Thit-lin da—Spathodea, *species.*
Thit mayza—Albizzia odoratissima
Thitnee—Unknown.
Thit-pa-gan—Pongamia, *species.*
Thitpouk—One of the Leguminosæ.
Thit pyoo—Lagerstrœmia, *species.*
Thitsee—Melanorrhœa usitatissima, *Wall.*
Tinyooben—Pinus khasyana.
Tin yoo ben—Pinus massoniana, *Lamb.*
Titseim—Terminalia bellerica, *Roxb.*
Tounbein—Artocarpus mollis, *Wall.*
Toung-tha-lay—Garcinia cowa, *Roxb.*
Toung-za-lat—Wrightia, *species.*
Tounkatseet—One of the Leguminosæ.
Toun pein nai—Artocarpus, *species.*
Tsambelay—Lagerstrœmia parviflora, *Wall.*
Tsay tham byah—Gardenia lucida, *Roxb.*
Tsheik khyee—Sapindus, *species.*

Yagine—Rottlera, *species.*
Yemaneh—Gmelina arborea, *Roxb.*
Yimma—Chickrassia tabularis Juss?
Yin dike—Dalbergia, *species.*
Yoong—Conocarpus acuminatus.

Zimbjoon—Dillenia aurea, *Sm.*

Major Benson gives the following experiments on Burmese woods.

No.	BURMESE NAMES.	Breaking Weight.	Specific Gravity.		Deflection.	Girth of Timber.	REMARKS.
		lbs.	lbs.	oz.	Inches.	Feet.	
1	Seet, Acacia stipulata……… 1	997	48	13	1·12	5 to 6	
11	Koko, Acacia species……… 2	758	38	9	1·2	5 to 6	Fractured specimens, good.
23	Seet, No. 2, do. do. … …. 3	600	56	3	1·25	5 to 6	
2	Yendaik, Dalbergia, *sp.*…… 4	1,000	83	0	1·7	2 to 3	The average of 4 specimens fractured
2½	Kyœ, Syndesmis Tavoyana. 5	646	not taken		1	2 to 3½	Do. of 2 specimens fractured
3½	Theetsee, Melanorrhœa usitatissima………………… 6	509	61	8	2·12	5 to 8	Do. 3 do.
15	Aeng, Dipterocarpus turbinatus ……… ……… 7	758	40	0	1·5	6 to 8	
24	Aengdab, „ lœvis.. 8	747	52	0	1·5	6 to 8	Do. 9 do.
46	Kanyeen-nee, „ elatus. 9	702	46	0	1·5	6 to 9	
17	Thubuyew, Dillenia ornata.10	808	44	5	1·75	6 to 9	Do. do.
56	Kyet Zinbuin, do. scabrella.11	*691	44	5	1·5	6 to 8	* These were inferior specimens, 800 lbs. would be the real breaking weight.
58	Zinbuin, do, speciosa..12	930	58	0	1·5	6 to 8	
20	Meenaban, Pavetta Indica.13	1,000	60	0	1	1 to 2½	3 good specimens.
25	Maneoga……………………14	772	44	5	1	3 to 4½	Do. do.
27	Banfboa, Careya arborea….15	900	47	0	2	3 to 5	Do. do.
33	Nubbay ………………16	795	60	0	1·5	0 to 0	Do. do.
35	Pethan, Bignonia stipulata.17	1,678	73	0	2·33	5 to 6	Do. do.
40	Yeng(k)at, Gardinia coronaria … ………………18	906	60	0	1·75	4 to 5½	Do. do.
53	Paugah, Terminalia bellerica19	1,000	58	2	1·75	4 to 6	Do. do.
60	Tonkian, Pentaptera, *sp.*……20	969	71	5	1·5	4 to 6	Do. do.
100	Therapee, Calophyllum longifolium ………………21	590	53	0	1·62	5 to 7	Average of 4 good specimens.
101	Parawah, Garcinia, *sp* ……..22	927	71	0	1·75	3 to 4½	Do. 3 moderate do.
102	Pedouk, Pterocarpus Indica23	1,000	71	0	2·25	5 to 10	Do. 4 good do.
105	Peemah ……………………24	822	38	0	1·5	6 to 12	The specimens broken seemed dry.
103	Pyenkado, Inga xylocarpa..25	1,153	83	0	2	5 to 7	Good specimens.
104	Pawoon, (*G*) Bytneria, *sp.*…26	1,351	72	0	3·5	5 to 7	These 3 specimens were not quite [seasoned.
106	Engyeen, Shorea robusta ..27	1,043	72	0	2·75	6 to 9	Good.
107	Letauk ……………………28	785	37	0	1·25	4 to 6	Do.
108	Nuggee (*G*) Pterospermum lancifolium ………………29	925	not taken		1·75	4 to 6	These specimens were too green to take out the specific gravity.
109	Gnew Yew, (*G*) Cassia fistula.30	1,151	do.		2	3 to 5	
110	Kyee Tha, Barringtonia acutangula ………………31	628	do.		1·77	4 to 6	Do. do.

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With the exception of the three specimens marked (G 104,108,109), the remaining 27 were selected from logs which had been exposed to two dry seasons and one monsoon, and may therefore be considered as nearly but not completely seasoned ; hence, the specific gravity given cannot be taken as the true or constant quantity, though doubtless sufficiently accurate for the general purposes to which the timber will be applied.

The size of the specimens tested was (3 feet by 1 inch $\frac{4}{10}$ square,) three feet long by 1 inch and $\frac{4}{10}$ square, they were intended to be 1½ inch square, but the testing apparatus having only at the bearings a space of 1½ inch square, it became necessary to reduce $\frac{1}{10}$ of an inch to admit the specimens being fixed.

These 31 specimens were chosen from about 100, as being suitable for the different purposes of ship-building and house-carpentry, of cabinet and ornamental work, and the construction of gun carriages, where great strength and elasticity are required.

In addition to these, the wood of Hopea odorata " Thingan," is used extensively by the Burmese in the construction of boats ; and boats, carrying 3 or 4 tons, are formed from the trunks of these magnificent trees. The trunk is scooped or burnt out and stretched in the centre, whilst warm, by means of cross pieces of wood. When the required breadth is obtained, the sides are built up to obtain a greater capacity, these tree boats, if they may be so called, are from 7 to 8 feet beam. The Thingan trees grow to a height of 250 feet ; they are found near Moulmein in laterite and sandstane chiefly. The breaking weight of Hopea odorata may be stated at 800 lbs. with a specific gravity of 45 to 46 lbs.

The oaks Quercus fenestra, Quercus turbinata and Quercus velutina, produce good durable timber, resembling that of the Dillenias in density and elasticity, the trees do not grow of that size to make the timber of the same value as the Dillenias, " Zinbuin." The Dillenias are not only valuable as timber trees, but for ornamental purposes. In March and April, the forests are really dazzling from the bright yellow flowers which are crowded on their leafless branches. Generally growing in a laterite soil. These trees would be worth cultivation in England.

The Fagrea fragrans, Anan, bears a breaking weight of 400 to 500 lbs., its chief value as a timber is its imperishability when exposed to water or damp. The Phoongies or Burmese priests look on it as a sacred tree : it is scattered thickly over the alluvial plains together with Strychnos nux-vomica.

Of the Leguminosæ, the first 3 specimens, No. 1 Acacia stipulata, Nos. 11 and 23, two species of Acacia not named, are used by the Burmese for naves and spokes of wheels. Acacia stipulata is a valuable wood for general purposes, its middling girth and scarcity would, however, render it useless except in small quantities and scantling. No. 2 Dalbergia, (species, resembling Bombay blackwood), 109 Cassia fistula—103 Inga xylocarpa, and 102 Pterocarpus Indica are of this order. 109 is a beautiful ornamental tree, wood useful for furniture, naves and spokes of wheels and tool handles ; No. 103, is a dense wood, resembling Cassia fistula used for windlasses, block sheaves and for parts of the gun carriage ; was found too brittle to resist concussion—Pterocarpus Indica is therefore preferred and generally adopted.

Of the Anacardiaceæ, No. 2½, Syndesmus Tavoyana, is a beautifully variegated wood, well adapted for furniture and oranamental purposes, is said to contain a dye, it is in great abundance in the islands on the coast and near Moulmein. No. 3½, Theetsee, Melanorrhea usitatissima, a dark red-wood, brittle, useful as above, it is from this tree that the famous theetsee varnish is obtained which is impervious to wet—33, Nbubay, one of the Anarcadiaceæ, has a dense wood and brittle. The above woods are abundant.

Of the Combretaceæ, No. 53 Terminalia bellerica, a strong good serviceable wood, where elasticity and strength are required.

No. 60, Pentaptera, *species*, is similar to the above, a valuable wood, abundant.

Of the Cinchonaceæ, No. 20, Meenaban, Pavetta Indica ? is called Moulmein Lancewood, but it is not equal to lancewood in elasticity, and beyond being useful for handles of tools, and such purposes, Major Benson thinks its qualities have been generally overrated, besides, it is susceptible to the attacks of insects.

No. 25, Maneoga, one of the Cinchonaceæ, its peculiarity of grain, which resembles oak, would make it useful for decorative purposes, very brittle.

No. 40, " Gardenia coronaria," this wood has a fragrant smell, and would be useful for boxes, but unfortunately when cut into planks there are so many flaws and cracks, that it is difficult to procure a piece of any size, it is a strong tough wood and would be useful for turning.

No. 27, Careya arborea, a good serviceable wood, having a good tenacity of fibre and durable. No. 110, Barringtonia acutangula, a tolerably good wood but tough to work, not recommended, being short-grained.

Dipterocarpaceæ.—No. 24, Dipterocarpus lævis, 15, D. turbinatus and 46, D. elatus ? are nearly identical and are useful for planking when not exposed to wet, extensively used in

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the Straits for this purpose in house-building, the wood oil is obtained from Kanyeenee, D. elatus, they are magnificent forest trees growing straight to the height of 250 feet and more ; an incision in the form of a cup is cut into the lower part of the trunk of the tree, which acting as a natural reservoir, collects the oil as it descends.

No. 106, Shorea robusta, a wood of dense structure and elasticity, well adapted for the manufacture of gun carriages, this wood stronger and less brittle than Pedouk.

BYTTNERIACEÆ.—No. 104, Byttneria, *species,* a wood of great elasticity and strength, the deflection with 1,351 lbs., being 3½ inches, the specimen was drawn through the supports, having only a bearing on each end of 1 inch ; an invaluable wood for gun carriages.

No. 108, Pterospermum lancifolium, a dense strong wood, but not equal to the above.

GARCINIACEÆ.—No. 101, Garcinia "parawah," a strong wood with a pretty variegated grain, the tree is of too small size to render the timber available for general purposes. No. 100, Calophyllum longifolium, a wood of no great strength, useful for planking and such like purposes, plentiful.

BIGNONIACEÆ.—No. 35, Bignonia stipulata, the strongest and most dense wood of the collection, a most valuable wood for purposes requiring strength, elasticity and density, it is pretty plentiful.

DILLENIACEÆ.—Nos. 17, 56, 58, three species of Dillenia "ornata," D. "scabrella" and D. "speciosa," strong good timber, the trees are very plentiful and of large girth, useful for general purposes, as house and ship-building.—*R. Benson, Captain, Deputy Assistant Commissary General.*

BUROONGI ? Quercus, *species.*

Quercus flexuosa ?

A tree of Mehra forest, near Abbottabad. An over-green oak, bearing acorns, leaves of young plant like those of the holly.—*Cal. Cat. Ex.* 1862.

BURTHOOA.—A small tree of Jullundur. Wood white, soft and light, used by the zemindars for the small wood-work of their houses, and for yokes of ploughs, and also for scabbards and weapons ; leaves used as fodder. —*Lieut. Col. Lake, Commissioner, Jullundur Division.*

BUTEA FRONDOSA, *Roxb.; W. & A.*

Erythrinum monosperma, *Lam.*

Pulasa. BENG.
Kinaka. ,,
Pouk-pin. BURM.
Pouk ,,
Mootr mara. CAN.
Thorus mara. ,,
Palas tree. ENG.
Dhak kino tree. ,,
Bastard teak. ENG.

Parasa. HIND.
Palas. ,,
Dhak. ,,
Pullus. MAHR.
Palasi. MALEAL.
Sanura of Panjab.
Pla. ,,
Chichra. ,,
Dhak. SANS.

Palasa. SANS.
Calu-keale. SINGH.
Garœla. ,,
Porasa maram. TAM.
Moduga chettu. TEL.

Kimsukamu. TEL.
Palasamu. ,,
Tella moduga. ,,
Togaru moduga. ,,
Palaso. URIA.

Its gum,

Kamarkhas.

Its seed,

Porasum seed. ENG.
Palasha. SANS.

Porasum verré. TAM.
Modugu vittulu. TEL.

Its flowers,

Pulaspapare ka phul. DUK.
Tesu. ,,
Kesu. ,,
Porasum flowers. ENG.

Pallas. MAHR.
Palasha. SAN.
Porasam-pu. TAM.
Muduga-puvu. TEL.

This small tree occurs in most parts of India. It is common in Kumaon. Dr. J. L. Stewart says that in the Panjab, when preserved, it grows to 40 feet high and 10 or 12 feet in girth. Its wood in the Panjab is fibrous and tough, but not strong, or durable, and it is used, there, for well-curbs and for gunpowder charcoal. It is very abundant in Dekhan Hyderabad. That of the Central Province of Ceylon, is used for common house-building purposes, a cubic foot of it weighs 38 lbs., and is said there to last 30 years. In Canara and Sunda, it is found most commonly below the ghats and in Dandelee forest. It, there, grows large, but always gnarled ; the wood is hardly distinguishable from teak, and is of similar qualities. Elsewhere Dr. Gibson mentions that the tree is common in forests, more so in those inland than on the coast. In the former localities, especially in Guzerat, it may be seen covering almost the whole of the uncultivated country. The wood appears to be little used in the Concan and other southern countries : but, in Guzerat (where it is called Bastard Teak), it is extensively employed for house purposes : and from what he had seen of it, he deems it both durable and strong-grained. Its leaves are largely used by hindoos as food platters. The roots afford a strong rope, and the beautiful red exudation forms one of the gum kinos of commerce. The flowers give a bright yellow dye. The flowers and gum are valuable in the arts, and the latter in native medicine. —*Roxb., Mr. Mendis, Drs. Gibson and J. L. Stewart, Captain Macdonald.*

BUTEA GIBSONII ?

Dhamin. HIND.
Dhamin. MAHR.

Under this name, Captain Sankey describes a Nagpore tree, with a wood of a light colour, possessing a fine clear grain, and with many of the properties of lancewood. Major Beddome, judging from the native name and the description of the wood, considers this to be Grewia tiliæfolia. It is procurable from 15 to 17 feet long and 2½ feet in girth at 6 annas per cubic foot. Dr. Gibson says that, from the facility with which it bends, this wood

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is held in great esteem for buggy shafts. The natives use it exclusively for the bent ribs of hackery poles. From the extensive use made of it, few, if any, trees attain their proper growth. Were it obtainable of proper size it would rival the finest timber, but, under the circumstances, he places it among the list of rafter woods, and even here the small quantity obtainable, will limit its application. —*Captain Sankey.*

BUTEA PARVIFLORA. A scandent shrub, flowers small and white.

BUTEA SUPERBA, *Roxb.; W. & A.*

Tige moduga. TEL.
Tivva moduga. TEL.
Baranki chettu. TEL.

This is an immense creeper with flowers resembling the Butea frondosa. It grows on the mountains of Coromandel, and is not uncommon in the provinces of Tavoy and Mergui. It yields the same kind of gum as Butea frondosa.—*Roxb. Eng. Cyc., page* 703.

BUXUS. THE BOX.

Palm-hout. DUT.
Box Wood. ENG.
Buis. FR.
Buchsbaum. GER.
Busso. IT.
Bosso. IT.
Bossolo. IT.

The species of this genus of plants afford the valuable hard Box-wood. Of the two European species, *B. sempervirens* and *B. balearica*, the former, or common Box, forms a large ever-green bush or small tree, common all over the south of Europe, from Spain to Constantinople, and reaching even so far as the north of Persia. The chief supply of Box-wood is derived from the southern parts of Europe, and from Asia Minor. A distinction is drawn between "Turkey" and "European" Box-wood. The latter is more curly, softer, and paler than the former. Dr. Royle has called attention to Buxus emarginatus, a native of the Himalayas. Several Asiatic woods have been discovered with much of the appearance of the common box-wood, and, amongst others, the Karens sometimes furnished Dr. Mason with specimens of a wood that can scarcely be distinguished from the box-wood of Europe, but he had never seen the tree, though he named it a Murraya. Dr. Wallich found *Nauclea cordifolia* on the banks of the Irrawaddy, which has "wood coloured like that of the box tree, but much lighter, and at the same time very close-grained." It may possibly be the same tree, as Dr. Mason's Murraya, although the Tenasserim wood is not light; or it may be a Tavoy tree, which he says has a strong tough wood, in grain like box.—*Dr. Mason, Eng. Cyc., Royle's Illust. Himl. Bot., p.* 327, *see* BOX-WOOD. ENGRAVING.

BUXUS CHINENSIS, *Lk.* The China box tree.—*Voigt.*

BUXUS EMARGINATUS, *Wallich.*

This Box-wood was introduced into Britain from the Himalayas; the wood appears as good and compact as that of the box-wood in use in Europe. But, on actual comparison, is found to be softer than the common kinds, though like them in other respects. Wood-cuts have been engraved upon the wood of Buxus emarginatus, which has the advantage of being of considerable size and thickness.

BUXUS SHAMSHAD. A lofty tree, wood white, hard, coarse-grained, sound; used by the poor in their houses, and of great commercial value.—*Lt. Col. Lake, Commissioner, Jullundur Division, quoting Balfour, page* 62. (*Note*—This seems B. sempervirens.)

BUXUS SEMPERVIRENS, *L.*

Chikni. PANJ.
Shumshad. ,,
Shumaj ,,
Sufed. ,,
Dhawi. ,,
Shandalaghuni. PANJ.
Papri of Salt Range.
Pappar of Jhilam.
Chikri of Kanawar.
Paprang of Kanawar.

Grows to the west of the Indus and in the basins of its affluents, and on the Salt Range at an elevation of 6,000 feet. Found in the valleys of Sutlej, Parbati, and near Dharmsalla; sometimes attains a girth of 20 inches, or more. Wood, when well-seasoned is equal to that of the olive, and is applied to similar uses. It is hard, heavy, and nearly as compact as the box-wood of Europe. It is made into combs. Is used in the Schools of Art throughout India for wood-engraving. It is in demand for plugs, for minie rifle balls, and at the Medical Store at Sealkot it is turned into pill boxes; it is useful for trenails and wedges. The wood is liable to split in the hot weather, and should be seasoned, and stored under cover. The Himalayan box appears to be identical with the tree common all over South Europe, from Gibraltar to Constantinople, and extending into Persia. It is found chiefly in valleys, at an elevation of from 3 to 6,000 feet. Dr. Cleghorn met with it from Mount Tira near Jhilam to Wangtú bridge on the Sutlej. It is variable in size, being generally 7 to 8 feet high, and the stem only a few inches thick, but attaining sometimes a height of 15 to 17 feet, as at Manikaru in Kúlú, and a girth of 22 inches as a maximum. The wood of the smaller trees is often the best for the turner and wood-engraver. It is made into little boxes by the villagers for holding ghi, honey, snuff and tinder. "The olive "zaitún," (and kau) which has also been tested for wood-engraving at the Madras School of Arts, is another plant of the Mediterranean Flora,

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which ranges from the coast of the Levant to the Himalaya. It varies a good deal in the shape of its leaves and in the amount of ferruginescence, hence the synonyms cuspidata and ferruginea; but it does not appear to differ specifically from the Olea Europea, the emblem of peace and plenty. The finest specimens that Dr. Cleghorn had seen are in the Kaghán and Peshawur valleys, where the fruit resembles that of rocky sites in Palestine or Gibraltar. The wood is much used for combs and beads—and is found to answer for the teeth of wheels at the Madhopúr workshops."—*Drs. J. L. Stewart and Cleghorn, Lieutenant-Colonel Lake, Mr. Powell.*

C

CADJAN. MALAY?

Jowli. GUZ.
Jowli. HIND.
Pannam olé. TAM.
Tennam olé. TAM.
Tati aku. TEL.
Cobaré aku. TEL.

A Malay word, used by the British in India, for the dried leaves of the palmyra palm, largely used for thatching.

CÆSALPINIA. A genus of plants, the species of which are trees or shrubs, yielding useful products. Of the Indian species, the C. bonducella and C. digyna are climbing plants, the seeds and oils of which are used in medicine. The pods of C. coriaria or sumach, a small tree, are used as a tanning material; C. paniculata, is a magnificent climber of the Himalaya, and C. sappan yields one of the Brazil woods of commerce.

CÆSALPINIA CORIARIA, *Willde.*

Poinciania coriaria, *Jacq.*

Libi Libi. ENG.
Divi Divi. „
Dibi Dibi. ENG.
American sumach. „

This small tree, met with in gardens in Madras and Secunderabad, grows plentifully about Salem, Bangalore, Hoonsoor and at Chicacole. It is a native of South America, but was introduced into India by Dr. Wallich about 1830, and is cultivated for the seed pods, as a tanning material. The wood is not known, but the tree is small and slow of growth.—*Voigt, M. E. J. R., Dr. Cleghorn's Reports.*

CÆSALPINIA SAPPAN, *Linn.; Roxb; W. & A.*

Lolan. AMBOYN.
Bakam. ARAB. BENG. GUZ. HIND.
Tein n'gyet. BURM.
Pattang. DUK.
Brasilienhout. DUT.
Sappan wood. ENG.
Brazil wood. „
Red wood. „
Brasiletto wood. „
Bois de Brésil. FR.
Brasilienholz. GER.
Pattangay. HIND.
Legno del Brasile. IT.
Verzino. „
Sachang. JAV.
Pattang. MAHR. HIND.
Sapang. MALAY.
Kaya sappan. „
T'sia-pangan. MALEAL.
Samya. MANIL.
Pao Brasil. PORT.
Patanga. SANS.
Madera del Brezil. SP.
Sibukas. TAG.
Taiapangam. TAM.
Vattanghy. „
Pattungh. „
Pattanga chakka. TEL.
Bakkapu chattu. „
Bakamu chakka. „
Bokmo. URIA.

This tree, as the various names will show, grows widely over South-eastern Asia, but its great value as a dye-wood, prevents its being used as timber. It is a very important article of commerce. It grows in the North Arcot forests, in the Nallamallai of Cuddapah: at Chindwarrah, and in the Kotah jungles. It is a native of Siam and Amboyna. It is found in the immediate vicinity of Prome, growing on the small hills of the place; but, except near Thoungzai, in the northern part of the Rangoon district, where it is also seen in small quantity, Dr. McClelland had not found it in the interior of the province or in the larger forests, so that it is perhaps scarcely entitled to a place amongst the natural productions of Pegu. It is cultivated in Palghaut for the purpose of dyeing the straw used in mat-making and from its high price for this purpose, it is not used for carpentry. It grows to a larger size in China than India. It grows with great luxuriance in South Malabar where it is cultivated rather extensively by the Moplahs who plant a number of the seeds at the birth of a daughter. The trees require 14 or 15 years to come to maturity and then become the girl's dowry. Dr. Cleghorn saw more on the banks of the Nellumboor river than anywhere else; but he did not ascertain the cause of this. The quantity raised is not great, and why it should be there in particular was not obvious to him, as Malabar is generally uniform in its character. He says that a better system of cutting and cultivating the Sappan, there, is desirable, and thinks the dye-wood is damaged by being allowed to float in salt water. It grows there without any care. The tree is not indigenous in the Bombay forests, but the wood is imported in quantity from the Palghaut jungles (?) for dyeing purposes. It grows freely in their cultivated places without any care, but the heart-wood is dingy, and wants that fine pinkish-red which the imports from the southern forest have. Its extreme height in Ganjam and Gumsur is 36 feet, circumference 2 feet, and height from ground to the intersection of the first branch, is 8 feet. The common powder used at the Holee festival is extracted from the wood of this tree. The seeds are used for colouring milk, and the wood as a red dye.—*Roxb.* ii. 357, *Voigt, Captain Macdonald, Major Pearson, Drs. Wight, McClelland, Gibson and Cleghorn.*

CÆSALPINIA SEPIARIA, *Roxb.*

Reichardia ? decapetala, *Roth.*

Mysore thorn. Eng.	Kilgatch. Hind.

Grows in Kumaon, Nepaul, Bengal, Ava, Tavoy, Mysore, and Ajmere. It is not a timber tree, but is a scandent strong-armed shrub, covered with bright green leaves and large yellow spikes of flowers, used to fence round fields, as a splendid impenetrable hedge. Hyder Ali surrounded fortified places with it. *Roxb.* ii. 360, *Voigt, Dr. Irvine.*

CAHAMILILE, Singh. In Ceylon, a very hard, fine, close, even-grained, heavy wood.

CAILLEA CINEREA.

Dichrostachys, cinerea, *W. & A.*	Desmanthus cinereus, *Willde.*
Mimosa cinerea, *Linn.*	Acacia dalea, *D. C.*

Mavalinga maram. Tam.	Venuturu. Tel.

This tree grows in Ceylon, in the Madras Presidency, and is common on sterile plains of the Dekhan, Delhi, Patna, and Paghamew. Wood not known.—*Voigt.*

CALAMANDER WOOD. Diospyros hirsuta.

Koulou-midvie. Singh.	Kalumederiye. Singh.
Koulmedvie. ,,	Calamander marum ? Tam.

See Diospyros hirsuta.

CALAMBUCO. The name of one of the best timber trees of the Philippine Islands, the wood of which is largely employed by the natives in the fabrication of domestic utensils and agricultural implements.—*Crawfurd's Dict., p.* 79.

CALAMUS. This genus of palms is indigenous to Asia, they abound in Southern Asia, in the Madras territories, along the foot of the Himalaya from Dehra Dhoon to Sylhet, in Assam, Chittagong, in the Malay peninsula, in Siam, Cochin-China, Sumatra, and in the Archipelago, and Dr. Griffiths enumerated 58 species. The species of the genus Calamus are mostly spreading shrubs or small trees, erect, or climbing to a considerable height, or trailing their weak stems several hundred feet along. Some of the species are formed into walking sticks : some, as the C. rotang and others, form the canes or rattans of commerce, of which the people of the Khassia hills make bridges 300 feet long. Those of the Animallai hills form long-looped ladders of them. When split, canes are much used in caning chairs or the framing of light carriages. But, it is not possible to say from what particular species the canes of the shops are obtained, it being probable that many are gathered indiscriminately ; C. rotang has, however, been said to furnish the stouter, and C. scipionum, the more slender sorts. But, the C. tenuis of Assam, C. gracilis, C. extensus and others, all furnish the canes of commerce. The flesh that surrounds the seeds of this genus is a delicate article of food ; limpid water flows from the stems when cut through ; and the young shoots of some of them, while still tender, are fritted or boiled, chopped small, and, being fried with pepper and gravy, are said to furnish a very delicate dish. One of the kinds of Dragon's Blood or Jurnang, is the produce of species of Calamus. Those which chiefly yield it are the C. petræus (Lour.), C. rudentum (Lour.), C. verus (Lour.), and C. draco (Willd.), of which the last three were by Linnæus reckoned mere varieties of the C. rotang (Linn.)—*Roxb. Griffith, Seeman, Voigt, Eng. Cyc.*

CALAMUS DRACO, of Sumatra and the Malay islands, is said to be one of the species which yield the Dragon's Blood of commerce. —*Roxb.* iii. 774, *Voigt*, 638.

CALAMUS PETRÆUS, *Lour.* One of the sources of the rattan cane.

CALAMUS ROTANG, *Linn. ; Roxb.*

C. Roxburghii, *Griff.*, *Royle*	C. petræus, *Lour.*

Bet. Beng. Hind.	Perambu. Tam.
Beta. ,,	Betamu. Tel.
Rattan. Eng.	Bettapu chettu. ,,
Rattan Cane. ,,	Niru Prabba. ,,
Cane. ,,	Pemu. ,,
Rattan Cane Palm. Eng.	Pepu. ,,
Rotan. Malay.	Prabba chettu. ,,
Bed. Pers.	Prabbali ,, ,,
Heen-we-wæl. Singh.	

This is said to furnish the stouter of the rattan canes of commerce. The hard flinty coatings of their stems, which are readily split into strips, are extensively used for the caning in the backs and bottoms of chairs, sofas, and light carriages. Everywhere canes are made into matting, and throughout the eastern islands of the Archipelago and about Malacca, vessels are furnished with cables formed of cane twisted or platted. They are likewise formed into ropes by the people of the forests, to drag heavy weights and to bind wild elephants. C. rudentum, *Lour.* ; C. verus, *Lour.* ; and C. draco, *Willde.* ; are regarded by Linnæus as varieties of C. rotang, and are said to yield the Dragon's Blood of commerce.—*Roxb.* iii. 777. *Voigt*, 639.

CALAMUS ROYLEANUS, *Griffith.* The most northern of the canes, being found in the Dehra Dhoon, and plentiful in all the eastern forests of Kumaon.

CALAMUS SCIPIONUM is said to furnish the more slender of the rattan canes of commerce ; it is also supposed to produce the Malacca canes, brought from Siak : but this latter is doubtful.

CALUVERE, Singh. Ebony, Eng. ? ? Under these names Mr. Mendis mentions a tree of the northern and eastern part of Ceylon.

as furnishing a fine black wood, used largely for buildings and furniture. A cubic foot weighs 71 lbs., and it lasts 80 years.

CALLICARPA ARBOREA, *Roxb.* A stout tall tree of Nepaul, Kumaon, Oude, the Morung mountains, Goalpara, Chittagong, and Moulmein. Wood not known. C. villosa, *Vahl*, grows in Sylhet. C. lanata, is a pretty large tree of the Circars.—*Voigt, Roxb.* i. 390.

CALLIGONUM POLYGONOIDES.

Phog. PANJABI.

A tree of the Panjab. The wood is small. The flowers called phogli, are eaten.

CALOPHYLLUM. A genus of plants distinguished by the beauty of their leaves, and named from καλον beautiful, φυλλον leaf. Several of these trees, in Southern India, have not, as yet, been specifically determined, and possibly they may all be only one or two species. They furnish useful timber; C. angustifolium yielding one of the Poon spars of commerce; and C. calaba, the East Indian Tacamahaca, though C. inophyllum is also quoted as the Tacamahaca tree.

CALOPHYLLUM, *Species.*

Oondie. MAHR.

Common on the Bombay Coast, growing on sandy sheltered spots close to the sea on the coast south of the Savitree. North of that river, it is rare. The wood never reaches any size, and is always crooked. A good bitter oil is furnished by the seeds. Dr. Gibson says this is C. inophyllum.—*Dr. Gibson.*

CALOPHYLLUM, a *species* of Tenasserim. House carpenters often use its timber, and the tree also furnishes spars.

CALOPHYLLUM, *Species.*

Poon-yet. BURM.

Firewood ? of British Burmah. A cubic foot weighs 39 lbs. In a full-grown tree on good soil the average length of the trunk to the first branch is 60 feet, and average girth measured at 6 feet from the ground is 12 feet. It sells at 12 annas per cubic foot.—*Dr. Brandis, Cal. Cat. Ex. of* 1862.

CALOPHYLLUM, *Species*,

Tha-ra-phee. BURM.

A wood of British Burmah, (Martaban ? and Tavoy ?) used for carving images, occasionally for canoes. A cubic foot of it weighs 57 lbs. In a full-grown tree on good soil the average length of the trunk to the first branch is 20 feet, and average girth measured at 6 feet from the ground is 4 feet.—*Dr. Brandis.*

CALOPHYLLUM, *Species.*

Thu-rap-pe. BURM.

A large tree, used for masts and spars in Martaban.

CALOPHYLLUM, *Species.*

Tur-ra-phee. BURM.

Used for masts, &c., in Tavoy. (The last two seem identical with the first of Dr. Brandis.)

CALOPHYLLUM ACUMINATUM.

Waldombe. SINGH.

A tree of the western parts of Ceylon, the timber of which is used for common house-building purposes. A cubic foot weighs 39 lbs. It lasts 20 years.—*Mr. Mendis.*

CALOPHYLLUM ANGUSTIFOLIUM, *Roxburgh.* This is the Piney Tree of Penang, where it grows. It occurs also in Coorg, Mysore, Canara, and along the Ghats northwards to Sawuntwaree, but rarely of any great size, beyond the line of the Neelgoond Ghat. It is a magnificent tree when growing in the ravines of the southern Ghats of Canara. According to Dr. Gibson and Dr. Cleghorn, the Poon spars are obtained from this tree, but the trees are becoming scarce, and are perhaps more valuable than teak. Dr. Gibson says that, to the best of his knowledge, the Poon spars are furnished by Calophyllum angustifolium, which is a magnificent tree in the ravines of the southern Ghats. In habit and appearance, it is totally distinct from C. inophyllum. These spars are found along the Ghats, from the Sawuntwarree border southward, but rarely of any great size till the line of the Neelcoond Ghat is passed. At another place he says that the Poon spars of the first class were not procurable in the jungles nearest to the coast, and probably, owing to the continued extension of cultivation, it is rather from the inland forests of Canara, backed as these are by those of Coorg to the east, that the supply of Poon spars is principally drawn. On his way from the Mysore border to Sircee, he saw, in more than one place, immense spars of Poon standing as trees, but scorched, burned up, and rendered useless. Subsequently, in 1864, Dr. Gibson writing from Marseilles, says that the Calophyllum longifolium as mentioned by Roxburgh, is the only tree which furnishes the real Poon spar. In this case, has Dr. Gibson, trusting to memory, alluded to Calysaccion angustifolium ? Dr. Cleghorn tells us that Poon spars are becoming very scarce and consequently are perhaps more valuable than teak. Young trees, especially such as are in accessible places, are most carefully preserved. Strict orders on this subject had been given in Coorg, Mysore and Canara. In one case which came within his observation, several valuable spars were found in a bridge, the total estimate for which was 250 Rupees, and, he adds, several instances of the same kind have occurred. But Poon spars, although highly prized for ship-building, are ill-suited for making bridges. This incident he remarks, illustrates the importance of officers in the Department of Public Works, Telegraph, &c., making themselves acquainted with the description of timber available and suitable for their wants. He also mentions that the Superintendent of Coorg had received several tenders for the supply of Poon spars and other timber at the distance of at least 3 miles from the Soolia river, showing the scarcity of such wood and the readiness of the Mangalore contractors to carry it several miles to the nearest water-carriage. These opinions of Drs. Gibson and Cleghorn, that the *Poon* spars of commerce, are obtained from the Calophyllum angustifolium are of great value. But, in 1850, in the Proceedings of the Madras Central Committee for the Exhibition of 1851, the Poon of commerce was supposed by Dr. Wight to be from the Dillenia pentagynia, "Rowadan," TEL., a large timber tree, and the wood of which is said to be exceedingly strong and very durable, even when buried under ground; it is a stately forest tree, common on the face of the W. ghats, it is also a native of the Northern Circars and flowers in March and April. The similarity of native names between this and Calophyllum inophyllum, led Dr. Wight to suspect some confusion, but he was satisfied that D. pentagynia is the tree which furnishes the Poon spars being a tall, and Calophyllum inophyllum a short stunted, tree. But Major Beddome considers that the C. angustifolium is a tree of Penang, and that C. bracteatum, *Thwaites*, a tree of Ceylon, and of the Western Coast of India is the Poon spar tree, though Mr. Thwaites does not mention it as producing such spars. Major Beddome likewise mentions that the S. Indian tree is C. elatum.—*Drs. Gibson, Cleghorn, Roxburgh, Tredgold, and Wight, Mr. Rohde's MSS., Major Beddome. See* POON.

CALOPHYLLUM BRACTEATUM, *Thwaites En.* p. 51.

Pongoo. TAM.

A tree of Ceylon, the Animallay, and Malabar, with a coarse-grained ornamental wood, which Major Beddome describes as yielding the Poon spar-tree.—*Beddome.*

CALOPHYLLUM BURMANNI, *Wight.*

Keena, SINGH.

A very common small tree, used for various purposes. Fruits edible.—*Fergusson.*

CALOPHYLLUM CALABA, *Linn.*

C. decipiens, *Wight Ill.* i. 128.
Calophyllum apurium, *Choisy.*
Calophyllum calabioides, *G. Don.*
Calophyllum apetalum, *Willd.*
Calophyllum calaba, *Linn.*
C. Wightiana, *Wall.*

Bubbe mara. CAN.
Calaba Tree. ENG.
Taitu panna. MALEAL.
Gorrukeenee. SINGH.
Cheru Pinnai. TAM.

This is a native of the western province of Ceylon, and of Travancore, and produces the true East Indian Tacamahaca resin. It grows to a height of 60 feet, and its timber is used for bullock carts, staves, cask headings and house-buildings. In Canara and Sunda, it grows on the banks of rivers and streams, chiefly above the ghats. The wood is used for canoes. Sir J. Herschel seems to think the East Indian Tacamahaca to be the produce of C. inophyllum, for, he says, specimens obtained from Calophyllum inophyllum, the Tacamahaca of Ceylon, are desirable, in order to aid pharmacologists in accurately determining the Tacamahaca of European commerce.—*Herschel's Manual of Scientific Enquiry,* p. 414, *Drs. Gibson and O'Shaughnessy, Mr. Mendis* ; *W. & A.*, p. 103.

CALOPHYLLUM INOPHYLLUM, *Linn.* ; *Roxb.*

Calophyllum bintagor, *Roxb.*
Balsamaria inophyllum, *Lour.*

Fifau. AUSTRALIA.
Sultana champa. BENG. HIND.
Wuma mara. CAN.
Undi. DUK. HIND. MAHR.
Alexandrian Laurel. ENG.
Ponna. MALEAL.
Dombe. SINGH.
Tel-domba-gaha. SINGH.
Ati of Tahiti.
Tamanu ,,
Pinné maram. TAM.
Ponna chettu. TEL.
Punnaga ,, ,,
Punnagamu ,, ,,

The flower,

Surpun ka phul. HIND.
Punaga. SANS.
Pinne-pu. TAM.
Ponna-pu. TEL.

The oil,

Poon-seed Oil. ENG.
Surpun ka tel. HIND.
Pinne-cotte yennai. TAM.
Pinnay yennai. TAM.
Ponnay nuna. TEL.

This beautiful tree grows in the western part of Ceylon where its hard, red, tough wood is employed for ship blocks, for masts and cross-sticks of Yettra dhonies and fishing boats and for poles of bullock carts. A cubic foot weighs 40 lbs. Dr. Wight says, as to Coimbatore, that the tree is rare at that distance from the coast, the wood is coarse-grained, but very strong, durable and ornamental, and on the coast is used in ship-building. In the alpine forests, it attains a great size and furnishes the *Poon* spars so valuable for shipping; so far as he could learn, there are two or three species of Calophyllum used for the same purpose under the general name of Poon. This is a beautiful tree with an appropriate name and very common, the tree he says is worthy of attention, as it grows well in sandy tracts close to the sea, where few others thrive, and a good lamp oil is obtained from the seeds. Dr. Bennett in his Gatherings says, the Calophyllum inophyllum, the Fifau in Australasia, grows, lofty and branching to a height of 50 or 60 feet. The wood is hard, red, close-grained and handsomely veined, and resembles mahogany in appearance and working. In cabinet-

[illegible] technology it "bottoms well." It is called Tamanu or Ati in Tahiti. The gum resin is the Tacamahaca, and is used by women in Tahiti as a perfume for their clothes.—*Drs. Wight and Cleghorn, Mr. Mendis, Voigt, Fergusson, Bennett.*

CALOPHYLLUM LONGIFOLIUM.

The-ra-pi. BURM.	Tha-ra-bi. BURM.

In Pegu this is found near towns, together with two other species of the same genus, which are of smaller growth. It has a red wood adapted to cabinet-making. It is abundant in Mergui, Tavoy and in lesser quantities near the Attaran River and its branches. Maximum girth 3 cubits. Maximum length 22½ feet. When seasoned, it sinks in water. It is there used for masts and yards of junks; it is excellent for helves, but not procurable at Maulmein in sufficient abundance. Strongly recommended to make models. Writing from Marseilles, in 1864, in a revision of the 2nd Edition of this work, Dr. Gibson observes that C. Longifolium as mentioned by Roxburgh as the only tree which furnishes the real Poon Spar; that the trees may be counted by thousands in the Coorg Ghauts, and may also be seen at Neelcund, Gairsappa and other places in South Canara.—*Drs. McClelland, Gibson, Captain Dance.*

CALOPHYLLUM MOONII, *Wight*, 52.

Dombakeena, SINGH.	Wallu-keena, SINGH.

Common in West and Southern Provinces of Ceylon, yields fine-long spars.—*Fergusson.*

CALOPHYLLUM TOMENTOSUM, *Wight.*

Keena-gaha. SINGH.

Forests of interior of Ceylon, a gigantic tree, and beautiful wood. Seeds furnish oil. —*Fergusson.*

CALOSANTHES INDICA, *Blainv.*

Bignonia Indica, *Linn.*	Spathodea Indica, *Pers.*
,, pentandra, *Lour.*	

Titu. MAH.	Pana wood. ANGLO-TAM
Totilla. SINGH.	Achi maram. TAM.
Pana Wodachi-maram. TAM	

This tree grows in Ceylon, Coimbatore, throughout the Konkans, in Mahim, and the jungles of Khandesh. Dr. Wight and Dr. Gibson mention that it is said to be a very soft and juicy wood, of no value. Immense pods hang from its branches in its leafless state. By all accounts it is a loose-grained wood, easily decaying. It grows in Behar. In the Tenasserim Provinces, it is often seen near the dwellings of the natives; and its seeds are frequently noticed on account of the large membranous wing with which they are surrounded. It grows luxuriantly in the cold regions of the Himalaya, and might probably grow in the open air of Europe also. At Lahore there was received from the hills a gigantic pod, not less than half a yard in length and four inches in breadth. The bark and capsules of this tree are astringent and used in tanning and dyeing. Every part of the tree is used medicinally.—*O'Shaughnessy, page* 480, *Hooker's Him. Jour., vol. I., p.* 86, *Mason, Honigberger, p.* 244, *Drs. Wight, Voigt, Fergusson*—*See* BIGNONIA INDICA.

CALOTROPIS, *R. Brown.* Of this genus, three species are met with all over Southern Asia, viz.

C. Gigantea, R. Br.

Asclepias gigantea, *Willde.*

Ashur. ARAB.	Madar. HIND.
Gigantic swallow wort ENG	Arka. SANS.
Akund. HIND.	Yercum. TAM.
Ak. ,,	Jilladu chettu. TEL.

also

C. Procera, R. Br.

Asclepias procera, *Ait.*	Calotropis gigantea, *Andr.*

Ak. HIND.	Beidelsar. HIND.
Madar ,,	Spulmei. PUSHTU.

and

C. Herbacea, Carey,

Asclepias herbacea of Roxburgh.

Chota Akunda. HIND.

Can scarcely be called a wood, but the roots are employed to make gunpowder charcoal. The stem yields useful strong fibres, and the white silk-like material of the pods, has been successfully tried to mix with silk. —*Voigt, M. E. Proceedings.*

CALYPTRANTHES CUMINI?

Mahadan. SINGH.

Grows in the northern and western provinces of Ceylon, where it is used for common house-building purposes, wheels, &c. A cubic foot weighs 36 lbs., and it lasts 20 years. The berries are eaten when fully ripe.—*Mr. Ad. Mendis.*

CALYSACCION ANGUSTIFOLIA.

Soorpunni. CAN.	Koolmarar. CAN.

Grows in Canara and Sunda, in ravines of the Ghats and below in sheltered valleys; but is not common in North Canara and Sunda. The tree is said to be used there for one of the "*Poon*" spars. It produces an excellent edible fruit. It is a tree which ought to be conserved everywhere and largely increased.—*Dr. Gibson.*

CALYSACCION LONGIFOLIA, *Roxb; Wight, Ill. I*, 130, *and Icon.* 1999.

Male Tree, Punag. CAN.	Taringi. CAN.
Female Tree, Wundi. ,,	Sura ponna. TEL.

A large tree which grows in the Northern

Circars, Konkans, the Kennari jungles and in Western Mysore. The flower buds are used for dyeing silk, and for their violet perfume.—*Useful Plants, Elliot's Flora Andhrica.*

CAMBESSEDEA OPPOSITIFOLIA, *W. & A.*

Mangifera oppositifolia, *Roxb.*
Opposite-leaved Mango. ENG.

This indigenous tree of Tenasserim has a reddish-coloured, hard, and close-grained wood, said to be durable. It produces a fruit much like a plum. There are two varieties, one bearing an intensely sour fruit, and the other one as insipidly sweet.—*Roxb., Mason, Voigt.*

CAMOOGA-WOOD, ANGLO-TEL. Kumooga maram, TAM. A wood of the Northern Circars.

CAMPHOR-WOOD. The camphor-wood of Sumatra is from the Dryobalanops camphora, of which the wood is hard, compact and brownish-coloured. The fragrant light-coloured, soft, wood of which the trunks and boxes from China are made, is supposed to be that of the Camphor tree of Japan, Laurus camphora, or Camphora officinalis. The Martaban Camphor-wood, Laurus (Sassafras) is a very large tree, scattered sparsely throughout the Tenasserim provinces. Wallich wrote that it was very like Laurus glandulifera, which furnishes the sassafras, and camphor-wood of Nepaul. The Karens call it the "tree galanga" from its fragrance.—*Holtz., Mason.*

CAMPNOSPERMUM ZEYLANICUM, *Thw.*

Aridde. SINGH.

A handsome Ceylon wood not much known. —*Fergusson.*

CANARA, NORTH AND SOUTH. The forests of N. Canara continue to furnish large quantities of the best timber produced in Southern India, but, till the middle of this century, the government authorities directed their attention principally to preserving the Teak, Sandalwood, Blackwood, Jackwood, Wild Jack and Poon trees—to the comparative neglect of other valuable woods. In the years 1843-44 to 1851-52 inclusive, the teak supplied from the Canara forests to the Bombay Dockyards and remaining in store amounted to 7,831 logs, equal to 26,714 candies, and the expenses incurred in delivering the same amounted to Rs. 1,47,277-1-8 or about six rupees per candy. There was, also, in addition, 784 logs, equal to 2,783 Bombay candies of Jungle wood. In the Fusly years 1251 to 1260 inclusive, there was exported from Canara, by sea, of Teak 18,187 candies, Poon spars 6,918 in number: of Sandalwood 86 candies and Blackwood 352 candies. In 1837, Col. Frith gave a list of 29 woods of Canara. In 1844, Dr. Gibson gave another of 32 woods; both of these lists were merely in their native names, but, some years later, in 1845-46, the latter gentleman gave a list of 164 timber trees and fancy woods with scientific, Canarese and Mahratta names, which he had found in the forests of Canara and Soonda. It is as follows, and the descriptions will be found alphabetically arranged.

Acacia arabica.
,, amara.
,, catechu.
,, Farnesiana.
,, leucophlœa.
,, odoratissima.
,, speciosa.
,, sundra.
Ægle marmelos.
Ailanthus excelsa.
Alangium decapetalum.
Alstonia scholaris.
Antidesma alexiteria.
Artocarpus hirsuta.
,, integrifolia.
Atalantia monophylla.
Azadirachta Indica.
Balanites Ægyptiaca.
Bassia latifolia.
,, longifolia.
Bauhinia acuminata.
,, parviflora.
,, variegata.
Bignonia Indica.
,, quadrilocularis.
,, undulata.
,, xylocarpa.
Bombax Malabaricum.
Borassus flabelliformis.
Briedelia spinosa.
Buchanania latifolia.
Butea frondosa.
Cæsalpinia sappan.
Calophyllum inophyllum.
Canthium nitens.
,, parviflorum.
Capparis divaricata.
,, grandis.
Carallia integrifolia.
Careya arborea.
Caryota urens.
Casearia elliptica.
Cassia fistula.
Celastrus montana.
Cedrela toona.
Cluytia collina.
Chickrassia tabularis.
Chloroxylon Swietenia.
Chrysophyllum acuminatum.
Cinnamomum iners.
Conocarpus latifolia.
Cordia Rothii.
Crataeva Roxburghii.
Cupania canescens.
Cullenia excelsa.
Dalbergia latifolia.
,, Oojeenensis.
,, paniculata.
,, sissoides.
Dichrostachys cinerea.
Dillenia pentagyna.
Diospyros cordifolia.
,, melanoxylon.
,, montana.
Ehretia ovalifolia.
Elæodendron Roxburghii.
Eriodendron anfractuosum
Erythrina Indica, Pangara.
Erythrina suberosa.
Eugenia caryophyllata.
,, jambolana.
Euphorbia tirucalli.
Euonymus garcinifolia.
Feronia elephantum.
Ficus t'siela.
Flacourtia montana.
Gardenia turgida.
Gardenia montana.
Garcinia glutinifera.
Garuga pinnata.
Givottia Rottleriformis.
Gmelina arborea.
,, Asiatica.
Grewia tiliæfolia.
Guatteria cerasoides.
Hardwickia binata.
Holarrhena.
Hydnocarpus inebrians.
Hymenodyction obovatum
Hymenodyction utile.
Inga xylocarpa.
Ixora parviflora.
Jambosa salicifolia.
Lagerströmia microcarpa.
Lagerströmia reginæ.
Limonia alata.
Mangifera Indica.
Melia azadirachta.
,, bukayun.
,, superba.
Memecylon tinctorium.
Mesua ferrea.
Michelia Nilgirica.
Michelia champaca.
Mimusops elengi.
,, hexandra.
Morinda citrifolia.
Myristica cinerea.
Nauclea cordifolia.
,, parviflora.
Nephelium longanum.
Nerium antidysentericum.
Odina wodier.
Olea dioica.
Pentaptera arjuna.
Phyllanthus emblica.
Pongamia glabra.
Premna integrifolia.
,, tomentosa.
Prosopis spicigera.
Pterocarpus marsupium.
Pterocarpus santalinus.
Putranjiva Roxburghii.
Randia dumetorum.
Rhus buckiamela.
Rottlera tinctoria.
Salvadora Persica.
Santalum album.
Sapindus emarginatus.
Schleichera trijuga.
Semecarpus anacardium.
Sethia Indica.
Soymida febrifuga.
Spondias acuminata.
Spathodea arcuata.
Sterculia balanghas.
,, fœtida.

Sterculia urens.
Stereospermum chelonoides.
Stereospermum suaveolens
Strychnos nux vomica.
,, potatorum.
Symplocos racemosa.
Swietenia febrifuga.
Tamarindus Indica.
Tectona grandis.
Terminalia alata.
,, bellerica.
,, catappa.
Terminalia Berryi.
,, chebula.
,, glabra.
Thespesia populnea.
Trophis aspera.
Ulmus integrifolia.
Vitex altissima.
Wrightia tinctoria.
Zizyphus glabrata.
,, jujuba.
,, œnoplia.
,, xylocarpa.

In South Canara, the jungles bear no comparison to those of Malabar or North Canara where there are large tracts of forest uninhabited, and where, by making a single road, some three or four thousand trees could be got out. In South Canara, the jungles are thickly populated, not by wild or wandering tribes, but by farmers, who carry on cultivation to a considerable extent. Each farmer is allowed the space of 100 yards all round his fields, on which he can cut timber and bamboos for his own use, free of all charge, there are however several lines of good forests which are called Merch wurg (Pepper wurg) and the ryot pays a Beriz on the wurg of five pie per pepper vine. When the koomki land and merchi wurg are separated there is but little of Government jungles left, and on this little, ripe trees are few and scattered. In 1861-62, the Conservator was engaged in girdling 1,500 trees of restricted timber, in the jungles in the Uppenangadi taluq, but scattered over a tract of jungle some thirty miles long, by five miles average width. Young trees are found in abundance, and with care there may be a considerable quantity of timber got in this part some years hence.

From South Canara, Mr. V. Pedro Coelho sent the following 50 woods to the Exhibition of 1862.

Sandal wood.
Teak wood or Sagavani.
Jack wood or Halsu.
Wild Jack wood or Hebalsu
Bengha wood.
Bou ,, (Building purposes.)
Bannapoo wood, ,,
Terruvah ,, ,,
Marava ,, ,,
Jembu Nerlu wood.
Votte Hully wood.
Tamarind tree wood.
Michelia champaca or Uru-sampige wood.
Kaddu sampige wood.
Daddalla ,,
Torenba, or Pumbilo wood.
Kalu boghe wood.
Pattu boge ,,
Shore Hone (Ship-building)
Uru Hone (Ship-building.)
Mango ,,
Járrige ,,
Nánne ,,
Andippu naru ,,
Cadippila (Dyeing.)
Manjutty (Medicine)
Purrally wood.
Nalikai ,, (Building.)
Santamary ,, (Gun Stocks)
Renje ,,
Page or Gargass (Polishing)
Ardall or Gamboge tree.
Cinnamon.
Mannadike wood.
Jungle Géru Kai (Medicine)
Cashew tree wood.
Hállay ,,
Tálly ,, (Building)
Coconnut tree ,,
Kunttal ,,
Karmara ,,
Dhuppa ,,
Lonkatty ,,
Tarrolly ,,
Areca-nut tree ,,
Blackwood ,,
Ebony ,,
Jummi Kai ,,
Takota Kai ,,
Pith.

—*Dr. Gibson, Mad. Cat. Ex. of* 1862 ; *Rep. Con. For. of* 1862, *p.* 30.

CANARIUM, *Species.* Under the names of Dhoop, Can., Dhoop and Googul, Mahr., Dr. Gibson mentions two species of Canarium, in Canara and Sunda, one on the Ghats above, and the second species seems to be cultivated near Bilgil and also at Siddapore, and is of great size. The choice gum resin afforded by these trees is extensively used in the arts and exported both inland and to the coast. Wood very good.—*Dr. Gibson.*

CANARIUM BENGALENSE, *Roxb., Fl. Ind.*, vol. iii, p. 136. An immense forest tree, a native of Assam and Sylhet and the adjacent mountainous countries, and flowering in May and June. From fissures or wounds in the bark, a large quantity of very pure, clear, amber-coloured resin exudes, which soon becomes hard and brittle, and is not unlike copal ; yet in Dr. Roxburgh's time the natives set little or no value on it. In the Calcutta bazar it was only valued at from 2 to 3 Rs. for seven maunds of eighty pounds each. Roxburgh does not mention the native name of this resin. Wood not known.—*Roxb.* iii, 136, *O'Shaughnessy, page* 285, *Voigt.*

CANARIUM COMMUNE, *Linn.; DC.; W. & A.; Kœn.; Roxb.*

Canarium mehenbethene, *Gært.*
C. Vulgare, *Rumph.*
Amyris Zeylanica, *Retz.*
Balsamodendron Zeylanicum, *Kunth.*
Colophonia Mauritiana, *DC.*
Bursera paniculata, *Lam., Rumph.*

Java Almond. Eng.
Bois de Colophane. Fr.
Jungli Badam. Hind.

Grows in the Mauritius, the Moluccas, Ceylon, the peninsula of India, and the Indian Archipelago. Character of its wood is not known ; but the bark yields an abundance of limpid oil with a pungent turpentine smell, congealing into a buttery camphoraceous mass. It has the same properties as balsam of copaiba ; and is said to yield East Indian elemi.—*Roxb.* iii, 137, *Dr. O'Shaughnessy, page* 288, *Voigt.*

CANARIUM GENICULATUM. A large and valuable timber tree found in the Pegu valley, but it is scarce. Wood, white coloured, adapted to every purpose of house-building.—*McClelland.*

CANARIUM STRICTUM, *Roxb.*

Black dammer tree. Eng.
Thelli. Maleal.
Kongilam maram. Tam.

Common in the alpine forests about Courtallum, and, in the Tinnevelly district, is regularly rented for the sake of its dammer. Character of wood not known. While adhering to the tree, the resin has a bright shining black appearance, but when held between the eye and the light it is translucent and has a deep brownish-yellow, or amber-colour.—*Roxb.* iii, 138, *Voigt, quoting Wight, Useful Plants*

CSL

NES.

Nathur. Guz.
Bet. Hind.
Rotan. Malay.
Bed. Pers.
Perambugal. Tam.
Bettamulu. Tel.

Species of the Calamus palms. *See* Calamus.

CANGOO, Tam. A Tinnevelly wood of a whitish brown-colour. Used for handspikes and wheelwright's work.—*Col. Frith.*

CANIS ? In Penang, a large tree ; used for door frames.—*Col. Frith.*

CANTHIUM DIDYMUM, *Gært.*

Webera cymosa, *Willd.*
C. umbellatum, *Wight.*

Poruwa mara. Singh.
Nalla regoo. Tel.
Naum Papula. Tel.

A small curved tree, common in Ceylon, the Godavery forests, and western Bombay Ghats; centre wood mottled and of a dark colour like old seasoned oak.—*Roxb.* i, 536, *Mr. Fergusson.*

CANTHIUM NITENS—?

Malai caurai. Tam.

Dr. Wight said that he had not seen the timber nor the tree itself, but that it had been described to him in Coimbatore, as a small tree. Dr. Gibson seems to consider Dr. Wight's Canthium nitens identical with C. didymum (the Canthium umbellatum Wight) and adds, that if right in this conjecture, the tree is a common one on the Bombay Ghats, and, from its flowers and shining leaves, well worthy a place in gardens. The wood is small and, is said, not put to any use.—*Wight, Gibson.*

CANTHIUM PARVIFLORUM, *Lam.; Roxb.; DC.; G.; Don.; W. & A.*

Webera tetrandra, *Willd.; Rheede.*

Kirni. Can.
Burra munga. Hind. ???
Kanden karra. Maleal.
Naga valli. Sans.
Karai-cheddi. Tam.
Sengarary maram. Tam.
Nalla balusu. Tel.
Balusu kura. ,,

Found as a small shrub, on many of the barren wastes of the Dekhan, and on hill ridges, but Dr. Gibson had never seen it of a size sufficient for any economical purpose. Roxburgh calls it a bush. Captain Beddome describes it, on the Godavery, as a dark-coloured, hard and pretty wood ; good for turning small objects. This corresponds with Dr. Wight's experience at Coimbatore where he says it occurs as a small tree or rather moderate size shrub, wood, close-grained and hard, well-fitted for turning small objects. *Roxb.* i, 534.—*Drs. Wight and Gibson, Captain Beddome.*

CAPPARIS APHYLLA. *Roxb.*

Wild Caper. Eng.
Leafless Caper. ,,
Karil. Panjabi.
Karir. Panjabi.
Kirra. Pushtu.

Grows in the Panjab and yields a hard wood which is used for turning, and in some places for rafters, white ants will not touch it ; it is also a good firewood, burning even when green. The fruit is eaten, both raw and preserved ; and the young flower buds are preserved as a pickle—the fruit when eaten largely, causes severe constipation.—*Voigt,* 75, *Powell, Hand Book.*

CAPPARIS DIVARICATA, *Lam.; W. & A.*

Pachoonda. Mahr.
Toaratti maram. Tam.
Bùdarèni. Tel.

A small tree, growing in Coimbatore, and not uncommon on the more arid wastes and in the dry hedges of the interior of the Bombay Presidency. Wood said to be only fit for fuel.—*Wight, Gibson.*

CAPPARIS GRANDIS, *Linn.; W. & A. W. Ic. i. t.* 21.

C. maxima, *Heyne in Roth.: Roxb. E. I. M.*
C. bisperma, *Roxb.*
C. grandis, *Klein.*
C. brevispina ? *Gibson.*

Waghutty. Malay.
Vellai toaratti maram. Tam.
Guli. Tel.
Gullem chettu. Tel.
Regutti. Tel.

A small tree growing in Coimbatore, and common in waste places inland of the Bombay Presidency, wood close-grained, hard and good, too small for general use, but good for turning.—*Wight, Gibson, Elliot. Flor. Andhrica, Useful Plants.*

CAPPARIS HORRIDA, *Linn.; W. & A. Ic.*

Capparis zeylanica, *Roxb.*

Ardanda. Duk. Hind.
Thorny caper-bush. Eng.
Hunkara. Sans.
Katallikai. Tam.
Atanday. Tam.
Adonda. Tel.
Arudonda. ,,

Useful as a hedge.—*Roxb.* ii, 567, *Thompson.*—*Voigt.* 74.

CAPPARIS SPINOSA.

Bassar. Panjab.
Kebarra. Push.

Abundant in the Salt Range and Lower Himálayan formations and elsewhere on limestone soil. The wood is very small.—*Powell.*

CARALLIA LANCEÆFOLIA, *Roxb.* A tree of Sumatra.—*Voigt.*

CARALLIA LUCIDA, *Roxb.*

Carallia integerrima, *DC.*
C. integrifolia, *Grah.*

Kierpa. Beng.
Maneiogn. Burm.
Phansi. Can.
Phansi. Mahr.
Dawata gaha. Singh.

This is a common and shady tree of Ceylon, growing from the Coast up to 3,000 feet. It grows on the Malabar side of India, in the Konkans, in the Circars, Kumaon, Sylhet, Chittagong, Pegu and Mergui. On the Bombay side, it is a handsome tree, pretty frequent in the forests of the South Konkan ; not seen elsewhere. Wood hard, close-grained, but used in turning and Dr. Birdwood states it is seldom large enough for any other purpose. It is described as a large tree, common north of Rangoon and throughout Pegu. Wood of a peculiar structure, thick medullar rays going through from the centre to the circumference, colour red, used for planks and rice-pounders, and may possibly be found useful for cigar boxes. A cubic foot weighs lbs. 60. In a full-grown tree on good soil the average length of the trunk to the first branch is 50 feet, and average girth measured at 6 feet from the ground is 10 feet. It sells at 8 annas per cubic foot. In the southern forests of Pegu it is a plentiful tree, of large girth, and, in Calcutta, is employed in house-building under the name of *Kierpa*. Mr. Fergusson says that in Ceylon its timber is strong and ornamental, suited for house-fittings and furniture. —*Roxb.*, ii, 481. *Drs. Gibson, McClelland and Brandis, Voigt, Fergusson.*

CARALLIA ZEYLANICA, *Wight's Ill., I,* 211.

Davette. SINGH.

Grows in the western parts of Ceylon where the wood is used as roofings for common house-buildings. A cubic foot weighs 42 lbs., and it is calculated to last 25 years,—*Mr. Adrian Mendis.* (*Note.*—Is Mendis' Davette, the Dawatagaha of Mr. Fergusson; the C. lucida ?)

CARAPA.— ?

Taila-oon. BURM.

A Tavoy wood, used in building.—*Col. Frith.*

CAREEMARADOO. TAM. ? A Travancore wood, of dark-brown colour, 2 to 6 feet in circumference ; used for carts and building. —*Colonel Frith.*—(This is probably a species of Pterocarpus.)

CAREYA, *Species.*

Kaga. BURM.

A large timber tree of Tavoy.—*Col. Frith.*

CAREYA, *Species.*

Zaza. BURM.

A Martaban wood, used for posts, &c.—*Col. Frith.*

CAREYA ARBOREA, *Roxb.* ; *Corr.* ; *Rheede* ; *W & A.*

Ban-bambhoosi. BENG.
Bambousi. BURM.
Baubwai. „
Cumbia. CAN.
Carey's tree. ENG.
Kumbi. HIND.
Koombha. MAHR.
Was koombha „
Pelou. MALEAL.
Kahatta gaha. SINGH.
Ave-mavo. TAM.
Puta-tanni maram. TAM.
Pailœ maram ? „
Kumbhi. TEL.
Budada-uedi ? TEL.
Cumbi.
Koombee. URIA.

This tree grows in most parts of India, of good size, and in many places abundant ; and, except Drs. Riddell, White and Cleghorn, and Mr. Powell in the Panjab who says it is of little use, its timber is praised by all who have noticed it, as a good serviceable wood, having a good tenacity of fibre and durable. It occurs in the south and west of Ceylon, in Coimbatore, is very common in the inland and coast jungles of Bombay, is found in the Dekhan, in Ganjam and Gumsur, is one of the most numerous trees throughout the province of Pegu, and is abundant in Tenasserim, Amherst, Tavoy and Mergui. Dr. McClelland says that in Pegu the timber is large, the wood red and equivalent to mahogany, and there forms the chief material of which the carts of the country are made, Dr. Mason adding that it is a useful timber for house-building, and Dr. Brandis mentions that it is used for gun-stocks, house-posts, planks, &c. A cubic foot of the Pegu wood weighs 55 lbs. In a full-grown tree on good soil the average length of the trunk to the first branch is 20 feet, and average girth, measured at 6 feet from the ground, is 9 feet. It sells, in Pegu, at 12 annas per cubic foot. Captain Dance says it is abundant in Amherst, Tavoy and Mergui, with a maximum length of 15 feet and maximum girth of 3 cubits : that its timber, when seasoned, floats in water, is useful, durable and tough, and for ordnance purposes he recommends it for helves. Dr. Gibson tells us that it is not much used on the Bombay side, but that the timber stands the action of water well. As it is generally crooked, he thinks it merits trial for the crooks of boats, corners of carriages, &c. In Ceylon, it is used for the axles of bullock carts and in buildings. Its fibrous bark is used as matches for matchlocks, guns, &c., and in Ganjam, according to Capt. Macdonald, the scanty clothing of the Byragi and other hindus affecting peculiar sanctity, is made of the fibrous bark of this tree. In Ceylon, a cubic foot of its wood weighs 35 lbs., and it lasts 10 to 20 years. In Ganjam and Gumsur, according to Captain Macdonald, its extreme height is 36 feet, circumference 3 feet, and height from the ground to the intersection of the first branch is 6 feet. Its flowers and calyces are used as medicine by the Singhalese.—*Roxb.* ii, 638, *Drs. Wight, Cleghorn, Brandis, Mason, McClelland, Gibson and Riddell, Captains Macdonald and Dance, Major Benson, Messrs. Fergusson, and Powell, Voigt,* 52.

CAREYA SPHÆRICA.

Bambousi. BURM.

This tree which is almost identical with C. arborea, grows in the Northern Circars, Chittagong and at Moulmein. Its bark serves as cordage, and is used as a slow match for guns.—*Roxb.* ii, 636, *Drs. Wight and McClelland, Colonel Frith, Voigt,* 52.

CARRI-MARRIDDI. TAM. ? A timber of Travancore, of dark colour, 1 to 4 feet in circumference ; used by wheel-wrights.—*Colonel Frith.* *See* CARREEMARADOO.

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CARISSA CARANDAS.

Gotho in Ganjam and Gumsur.

Described by Captain Macdonald as of extreme height 20 feet, circumference 2½ feet, height from ground to the intersection of the first branch, 7 feet. But, useless except for firewood.—*Captain Macdonald.*

CARPINUS VIMINEA,

Himalayan hornbeam. Eng.
Chamkharak. Panjab.

The wood is hard and heavy, and is esteemed by carpenters. The tree is rare in the Panjab, and is perhaps not found west of the Sutlej. Elevation, 5,500 feet.—*Mr. Powell.*

CARYOTA HORRIDA, *Gardn.; Moon's Cat.*

Areca horrida, *Thwaites, Hooker.*
Katul kittu. Singh.

A tree of Caracas, introduced into Ceylon and into the Calcutta gardens.—*Voigt*, 637.

CARYOTA URENS, *Linn.*

Ban khajur. Beng.
Ramguoah? „
Bon khejur. „
Yels kae? Can.
Bhyni. „
Mear? „
Kitul. Ceylon.
Malabar Sago palm. Eng.
Ghat palm. „
Bastard Sago palm. „
Ram-guoah? Hind.
Mare? „
Bara flawan? „
Berli. Mahr.
Nibong. Malay.
Shunda pana. Maleal.
Nepera. Singh., the wood.
Kittul. „ the tree.
Ootali panna. Tam.
Bherli-mahar. „
Cundal panai maram. „
Konda panna. „
Evim-pannah. „
Erim pannah. „
Chirugu. Tel.
Konda jiligu. „
Jirugu. „
Marre. „
Salopa. Uria.

This very ornamental palm grows in Ceylon and Malabar, in Canara, Sunda, on the Godavery, in Ganjam, Gumsur, Assam, Sumatra and Borneo. It grows to a height of forty feet with a ringed, tall and slender stem, of more than a foot in diameter. It is found on the sea-shore and ascends the mountains of Sikkim to the height of 5,000 feet. Its outer wood (outside the pith) is nearly as hard as flint, of which, like all the grasses and palms, it contains a considerable quantity. Where it grows in abundance, it is one of the most useful of trees. The root is hollowed for the buckets used in irrigation, and the trunk, when hollowed, by freeing it from the inner pith, forms a convenient and economical water conduit. In Ceylon, where it is common up to 3,000 feet, as also in Sumatra and Borneo, it is used for rafters, reepers, window bars, posts, &c., but is little durable, rarely lasting above 3 or 4 years. Its pith or farinaceous part is filled with starch granules equal to the best sago, which are extracted by the people and made into bread or pottage. Its spathes yield a toddy or palm wine, *Koondel panai kallu*, Tam., and, during the hot season, a single tree will yield at the rate of a hundred pints in the 24 hours. This is used as an intoxicating liquor, as yeast in baking bread, is converted into the spirit called Bhyni Arrack, and into sugar or the jaggery called *Koondel panei vellum*, Tam. Its cabbage is preferred to that of the cocoanut. Its leaves are very large, measuring eighteen or twenty feet in length, and from ten to twelve across; from their fibre, the "kittul fibre" of commerce, ropes of great strength, brushes, brooms, caps, and similar articles are manufactured; the kernel is used for buttons and beads: the woolly material found on the petioles is used as oakum for caulking ships. In a recent account of the 'Vegetable Products of Ceylon,' by Mr. Ondatjee, it is said that the *black fibre* from the leaf-stalks, manufactured into rope, of great strength and durability, is used for tying wild elephants. The Rodyah, a forest race among the Kandyans, make this rope generally with considerable skill, as it is both regular and compact. At the Madras Exhibition of 1855, the nar or fibre of this, the Indian Sago palm was exhibited from Cocanada, Nellore, Masulipatam and Travancore. It is much used by the natives for making fishing lines and bow-strings, is very strong and resists water for some time, but is liable to snap if suddenly bent or knotted. It resembles black horse hair and might be employed similarly. In Borneo, the outer part is split into the form of lathes which are used as the rafters to which the roof-covering and the open-flooring are tied. These are two inches apart, but kept together by rattans, interwoven amongst them. Dr. Gibson says it is one of the most useful trees in the country, and he had heard that the farm of this tree, throughout the single district of Yellapore in Soopah, yielded Rs. 30,000 per annum—*Roxb.* iii. 625, *Drs. Wight, Gibson, Royle, Hooker, Marsden, and Ainslie, Mr. Mendis, Low, Captain Macdonald, M. E. J. R., Seeman. Voigt* 637.

CASEARIA, *Species.*—Dr. Gibson says, a species of Casearia, not elliptica, may be seen growing at Darebae Wurgaum, on the horse road from Jooneer to Nuggur, and which he had not seen elsewhere. It is of a size fit for house-building.—*Dr. Gibson.*

CASEARIA, *Species.*

Peda-kal-mesura. Tel.

A large tree, of the Godavery forests, with ovate leaves, wood of a light-yellow colour, hard, and does not warp. It is worthy of attention. Fruit used to poison fish.—*Captain Macdonald.* (Is this C. ovata ?)

CASEARIA CANZIALA, *Wall.*

Samyda canziala. *Buch* !!
Ana vinga. Maleal.

A large tree growing in Assam and Bengal, [illegible] bitter. Its leaves are used in baths, and the pulp of its fruit as a diuretic.—*Roxb.* ii. 420.

CASEARIA ELLIPTICA.

Bhogara. Mahr.	Klaare maram. Tam.

This, in Coimbatore, is a large shrub rather than a tree. On the Bombay side, it occurs as a small tree, not uncommon near the Ghats but much less so elsewhere The wood is smooth, fine-grained and yellow coloured, but from its small size is unfit for timber purposes, and can only serve as an ornamental wood.—*Drs. Wight and Gibson.*

CASEARIA OVATA, *Roxb.*

Ana-vinga Maleal.	Peda-kal-mesura. Tel.

A large tree of the Godavery, leaves ovate, oblong, glabrous, serratulate, flowers 8 anthers, capsule 3-valved with 3 ridges on the outside of fruit. Wood of a light yellow colour, hard, does not warp, and is worthy of attention. Fruit used to posion fish.—*Captain Beddome. Roxb., Fl. Ind.*, ii. 420.

CASEARIA PENTANDRA.

Tha-byai-ywet-kya. Burm.

Found in the Pegu district, but, scarce. Timber strong and close-grained. Adapted for fancy work and cabinet-making. *Roxb.* ii. 421—*Dr. McClelland.*

CASEARIA TOMENTOSA, *Roxb.*

Chila. Panj.	Gam-gudu. Tel.
Chilla. ,,	

This small tree grows in the North and South of India. In the Panjab, is not uncommon in the Siwalik region at from 2,000 to 3,000 feet, and near the Indus. In Kumaon, Mr. R. Thompson describes it as a small handsome tree, with oblong leaves; timber of a light yellow colour, close-grained and well adapted for turnery. Fruit pounded and used for intoxicating fish. Its timber is whitish, soft and brittle, and is only used for small wood-work.—*Roxb.* ii. 421 *J. L. Stewart*, p. 44, *Mr. R. Thompson.*

CASSIA, a genus of plants belonging to the natural order *Leguminosæ.* It consists of a large number of species, chiefly inhabiting the tropical or temperate parts of the world, and including among them the plants that produce the senna leaves so commonly employed as a purgative.

CASSIA, *Species.*

Ngoo-tha. Burm.

A tree of Moulmein, made into house-posts: fruit and bark used medicinally.—*Cal. Cat. Ex.* 1862.

CASSIA, *Species.*

Gnoo-gyee. Burm.

Common in the plains and on the hills of Pegu, wood used for bows, axles of carts, &c., &c. A cubic foot weighs 57 lbs. In a full-grown tree on good soil the average length of the trunk to the first branch is 15 feet, and average girth measured at 6 feet from the ground, is 4 feet.—*Dr. Brandis.*

CASSIA, *Species.*

Tanghani. Uria.

A tree of Gumsur and Ganjam; extreme height 40 feet, circumference 3 feet, height from ground to the intersection of the first branch, 18 feet. Used in Ganjam for posts and rafters, and burnt for firewood. It is tolerably common in Bodogoda, but seems to be scarce in Gumsur.—*Captain Macdonald.*

CASSIA AURICULATA.

Turwer. Hind.	Avaraipattai. Tam.
Mayharie. Sans.	Tanghedoo. Tel.
Talopodo. ,,	Tangada wood. Ang.-Tel.
Avarai maram. Tam.	Tangada karra. Tel.

A common shrub in the Madras Presidency, grows abundantly in the sterile tracts, and in all parts of the Dekhan. The bark is used for tanning, and the stems to make native tooth-brushes; with the bark a soft and durable leather may be turned out, and on the whole, it is perhaps the best of the indigenous astringents of Southern India for tanning. All parts of the plant have much astringency, and seem to possess no other property.—*Roxb., O'Shaughnessy*, p. 309, *Ainslie, M. E. J. R.*

CASSIA CINNAMOMUM.

Dawol kurœndo. Singh.

Under these names, Mr. Mendis describes a wood, used for common house-building purposes. The tree grows in the central province of Ceylon. A cubic foot weighs 39 lbs., and it is esteemed to last 20 years.—*Mr. Adrian Mendis.*

CASSIA FISTULA, *Linn.*

Cathartocarpus fistula, *Pers.*
The tree and its product.

Bukbur. Ar.	Tung-guli. Java.
Kyyar-chember? ,,	*Its product.*
Banur lati-gach'h. Beng.	Cassia pulpa. Lat.
Sondali. ,,	Bawa. Mahr.
Sonalu. ,,	Baya. ,,
Gnoo-shwoay-ngu-bin. Burm.	Gurmala. ,,
Kakae. Can.	Chuné. Maleal.
Cakay. ,,	Mentus. ,,
Amultas. Duk.	Gird-nalli of Dera Ghazi Khan.
Pykassie. Dut.	Khyar-i-Chembir. Pers.
Pudding pipe tree. Eng.	Cassia purgante. Port.
Purging Cassia. ,,	Suvarnam. Sans.
Indian laburnum ,,	Suvarnuka. ,,
Casse fistulense. Fr.	Abilla. Singh.
Purgir cassie. Ger.	Æhœla. ,,
Gurmalla. Guz.	Konné maram. Tam.
Amltas. Hind.	Sarakonné maram. ,,
Gurmulla. ,,	Suvarnam. Tel.
Kyar kanyar. ,,	Réyla. ,,
Polpa di cassia. It.	Soonaree. Uria.
Dranguli. Jav.	

A tree from 20 to 40 feet high, met with all over Southern Asia, with a girth of 3 or 4 feet, and the height to the first branch 10 to 15 feet. It is uncommonly beautiful when in flower, few trees surpassing it in the elegance of its numerous, long, pendulous racemes of large, bright-yellow flowers, intermixed with the young lively green foliage. It bears a striking resemblance to the laburnum. It varies in size, in different localities. In Ceylon, Mr. Fergusson describes its wood as close-grained, but small and curved, though used for tom-toms. In Coimbatore, being too small for useful timber, but in Malabar it attains sufficient size to be adapted for the spars of native vessels. The wood weighs lbs. 66 to the cubic foot, is close-grained and of moderate strength; in Coimbatore, used for tom-toms. In Ganjam and Gumsur, where it is tolerably common, it is made into plough-shares and rice-pounders. It is common on the hills and plains of Pegu, where it is used for bows, axles of carts, &c. Mr. R. Thompson says that in Kumaon and Gurhwal, its maximum height is 30 feet, and timber 10 or 12 feet long and 3 feet in girth, and the wood heavy, close-grained and brittle, of a deep-red colour. Dr. Stewart and Lieutenant-Colonel Lake say that, in the Panjab, it is brittle and liable to insects, but this may not refer to the heart-wood. It has long cylindrical pods, from 9 inches to 2 feet in length, internally, divided into partitions, each with a flat seed, surrounded by a soft pulp. Two pounds' weight of the fruit yield eight ounces of the concrete pulp: which forms an article of commerce. Its bark is used in tanning. The bark of the root is a strong purge.—*Roxb.*, vol. ii., p. 333, *Drs. Wight, Gibson, Irvine, Brandis, J. L. Stewart, Messrs. Powell, Rohde.*

CASSIA FLORIDA, *Vahl.*

Cassia Sumatrana, *Roxb.*
„ Senna, „

May-za-lee. BURM.
Mazalee. „
Bombay Black-wood. ENG.
Waagass. SINGH.

This tree grows in the central province of Ceylon, where a cubic foot of its wood weighs 57 lbs., and it is said to last 50 years. It is there used for furniture and house-building. It is cultivated in British Burmah, is plentiful throughout the Hlaine, Pegu and Tounghoo forests, and is very plentiful, especially on the Mazalee Choung, the name of which is derived from this tree, heartwood almost black used for helves, walking sticks, mallets, &c. In a full-grown tree, on good soil, the average length of the trunk, to the first branch, is 15 feet and average girth, measured at 6 feet from the ground is 6 feet. Dr. Mason tells us that the Cassia florida in Tenasserim has wood "not inferior to ebony."—*Drs. Brandis, Mason and McClelland, Mr. Mendis.*

Note.—Under the names of Cassia Sumatrana? Kyee, BURM.? there was sent to the Exhibition of 1862, specimens from a tree of Moulmein, of which the wood is said to be used in ordinary house-building. Are these two identical?—*Cal. Cat. Ex.* 1862.

CASSIA TIMORIENSIS, *D.C.*

Arramana. SINGH.

A tree of Ceylon, heartwood hard and black like ebony.—*Fergusson.*

CASTANEA INDICA.

Theet-khya. BURM.

Is a large tree, plentiful in the Rangoon, Pegu and Tounghoo districts. Wood red; equivalent to mahogany.—*Dr. McClelland.*

CASTANEA MARTABANICA.

Thit nya. BURM.
Norne. „ of Tavoy.
Zi-tha. BURM.? of Tavoy.

A tree of Moulmein and Tavoy. The fruit eaten exactly like chesnuts.—*Cal. Cat. Ex.* 1862.

CASTANOSPERMUM AUSTRALE.

Moreton Bay Chesnut. ENG.

This tree grows to a height of thirty or forty feet, and has been introduced into India from Australia.

CASUARIA POMANDRA.

Tha-byai-ywet-kya. BURM.

This is found in the Pegu districts, but scarce. Timber strong and close-grained. Wood, white coloured, adapted for fancy work and cabinet-making.—*McClelland.*

CASUARINA EQUISITIFOLIA.

Beef wood. ENG.
He Oak of Australia.
Sarv ka jhar. DEK.
Arroo tree of the Archipelago.
Fir tree of the English.
Filaof of Madagascar and Mauritius.
Kasa-gaha. SINGH.
Ironwood of the South Sea Islands.
Aito of Tahiti.
Toa of Tahiti.
Chouk maram. TAM.
Serva chettu. TEL.

This tree was introduced into India about the beginning of this century, and is now well established in all parts of it from the Panjab to Ceylon and Singapore, growing freely and ripening seed in great abundance. In general appearance, it much resembles the larch fir, it grows in 10 years to the height of about 30 feet. It generally grows very straight, and, where the main shoot is broken or lopped off, readily throws out secondary shoots which are usually straight and erect. It thrives best in sandy tracts along the sea shore. It has been planted largely near Madras, but a beetle has injured the growing trees. The wood is reddish in colour: in density and appearance it somewhat resembles Trincomallee. It is so hard as to injure tools, bears a great strain, is well adapted for posts, and is said to bear submersion in water

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very well. The bark contains tannin, and a brown dye has lately been extracted from it by M. Jules L'Epine of Pondicherry. On the whole, this tree well deserves extensive cultivation on sandy tracts, where it grows so readily. It is a favourite avenue tree ; and, kept dwarfed forms a beautiful hedge. Much of the sandy coast of the eastern side of the Peninsula of India might be planted with it, but the groves of trees need care.—*M. E. J. R., Dr. J. L. Stewart.*

CASUARINA MURICATA, *Roxb.*

Fir Tree of the English in India.
Tinian Pine.
Beef wood.
Club wood of Tahiti.
Huri. HIND. ?

This is a native of Chittagong, and is the only species indigenous to the Tenasserim Coast, but is now grown in all parts of the Dekhan, where it was introduced about 1830, and has been diffused over Bengal. In Tenasserim, it is found only in the loose sandy soil of the seaboard and never inland. In general outline, it resembles the pine, but it is of a more slender figure, and more elegant in appearance. Roxburgh says it resembles toon in appearance Dr. Mason tells us that, in Tenasserim, it is a remarkable tree, growing eighty feet high and spreading out without a leaf of covering ; but its numerous fine knotted branchlets, mantled with brilliant green, and hanging in drooping bunches, or floating out lightly upon the breeze like long skeins of green silk, adorn it with the most graceful drapery and make it one of the most desirable trees for embellishing a Tenasserim park. It grows 60 to 80 feet high, with trunks 3½ feet in circumference four feet above the ground. The wood is very hard and durable, and the Tahitians in their war-days chose it for the manufacture of their ingeniously carved war-clubs ; hence they termed it club-wood. They also fashioned valuable fishing hooks from its roots. Dr. Mason further informs us that it is imported into the United States in considerable quantities, for various purposes where a hard heavy wood is required, and the Casuarina on the Tenasserim Coast can furnish almost any quantity of this timber, but it is very little used. The natives of Tenasserim call it by the same name as the pine.—*Drs. Roxb.*, (vol. iii, p. 59) *Riddell and Mason.*

CATHARTOCARPUS JAVANICUS, *Pers.*

Cassia Javanica.
Horse cassia. ENG.

A native of Java and the Moluccas, with legumes above two feet in length, containing a black cathartic pulp used in India, as a horse medicine. Wood unknown—*Eng. Cyc.*

CATHARTOCARPUS NODOSUS, *Voigt.*

Cassia nodosa.
Knotted cassia. ENG.

Remarkable for its large pink coloured flowers. It is highly esteemed in Bengal, and is found in the Tavoy forests. Wood unknown. —*Dr. Mason.*

CATHARTOCARPUS ROXBURGHII, *DC.*

Cathartocarpus marginatus, *G. Don.*
Cassia marginata, *Roxb.* (not *Willd.*)
Roxburgh's cassia. ENG.

A highly ornamental tree, in form much resembling the weeping ash. It is a native of Ceylon, and of the south of India, frequent in the jungle between Trichinopoly and Dindigul, and to be found in Indian gardens. The wood is hard and handsomely marked, and may hereafter prove a valuable addition to the timbers of India.—*Roxb.*, vol. ii, p. 338.

CAUTOVANGA, a dark-coloured, very strong wood of Palghat, used for wheelwright's work.—*Col. Frith.*

CAWA-ARANG, a light brown or pale brown coloured wood of Penang, from a very large tree ; used for furniture and ornamental work.

CEDAR.

Ers ARAB.
Eraza „
Ceder. DUT.
Cedre. FR.
Zeder. GER.
Erez. HEB.
Cedro. IT.
Cedrus. LAT.
Kedr. RUS.
Cedro. SP.

A commercial term given to the woods of several distinct kinds of forest trees, the timbers of which are distinguished as Red and White cedar ; Barbadoes, and Bermuda cedar : cedar of Lebanon, Pencil cedar, Bastard cedar, and some of these grow in America, some in Europe and some in Asia. The cedar of Lebanon so famous in Scripture, was, in ancient times, much employed in the construction of temples, and for other religious buildings and purposes. It is usually called Pinus cedrus, but sometimes Cedrus Libanus. The lofty Deodara, a native of the Himalaya, with fragrant and almost imperishable wood, and often called the Indian cedar, is sometimes referred to the genus Pinus, and sometimes to those of Cedrus or Larix, with the specific name of Deodara. But Dr. Hooker is of opinion that the Deodar and the cedar of Lebanon are identical. The woods of several of the Coniferæ are called cedars. But, in India, the term Bastard cedar, is applied to the Guazuma tomentosa, while, in New South Wales, the term white cedar is applied to Melia azaderach, and red cedar to that of Flindersia Australis, and the name is also given to the woods of the Cedrela toona and Chickrassia tabularis. In China, a kind of cedar, probably a cypress, called Nan Mah, or Southern Wood, which resists time and insects, is considered peculiarly valuable and is especially reserved for imperial use and buildings, and the cedar-wood of Japan, according to Thunberg, is a species of cypress. The cedar of Guiana is the wood of Icica altissima. The white wood or white cedar of Jamaica is Bignonia leucoxylon. The word "cedar," in the United States, is applied to various genera of the pine family. The Virginian red cedar (Juniperus virginiana) is a juniper; is called red or Pencil cedar, the white cedar of the southern swamps is a cypress; the wood of Juniperus Bermudiana is called Bermuda cedar, and, that of J. Barbadensis, is called Barbadoes cedar; while the Juniper of the North of Spain, and South of France, and of the Levant, is from J. oxycedrus. The white cedar of North America, a less valuable wood than the red cedar, is yielded by Cupressus thyoides. Under the term cedar, Col. Frith describes a reddish coloured wood of Palghat, specific gravity 0·507, as a large tree, wood aromatic and used for furniture. And under the name of cedar-root, a very aromatic wood, used for ornamental furniture, in Palghat. These two are possibly from the Cedrela toona. The wood of the cedar of Lebanon, as now met with, is not in much esteem, and it is generally supposed that some other tree was employed in the temple, but that of the Cedrus deodara of the Himalaya, really possesses all the good qualities for which those of Lebanon were praised. Specimens of the wood of the Indian cedar, Cedrus deodara, and of the cypress, "Cupressus torulosa," from the Himalayas, were shown by Dr. Royle at the exhibition of 1851: the former has been introduced into England as a beautiful ornamental tree and appears to promise well as a useful timber tree, as the wood works well and freely.—*Faulkner, Drs. Hooker, Holtzappfel, McCulloch, Williams, Burton's City of the Salt Lake.* See Chickrassia tabularis.

CEDRELA TOONA, *Roxb.*

C. hexandra, *Wall.*

Tunna.	BENG.
Thit-ka-do.	BURM.
Tundu.	CAN.
Tunda.	,,
Suola mara.	,,
Toon tree.	ENG.
Bastard cedar.	,,
,, mahogany.	ENG.
Toona.	HIND. SANS.
Toon.	MAHR. BENG.
Kooruk.	,,
Loodh?	SANS.
Cuveraca.	SANS.
Toon maram.	TAM.
Wunjooli maram?	,,
Maha limbo.	URIA.

This large and valuable tree grows in varying abundance at the foot of the Himalayas, also in the north-eastern provinces and to the south, in Bengal and in both Peninsulas of India. It is rare in the Central Provinces. In the Panjab it grows up to 2,500 to 4,800 feet with 7 to 12 feet in girth. Its growth is there rapid, its darkish wood is not subject to worm or warp, looks well when properly polished, and is there a favourite for cabinet work. Mr. R. Thompson says it grows to a large size in the outer moist valleys of Kumaon and Ghurwal, and hill-men will not sell their trees. In the hill provinces, it is used as posts, panels and carved fronts of hill-houses, also, turned into milk and water pitchers. In Kumaon, trees with girths of 12 to 16 feet, yield planks up to 3 feet broad, but 2 feet is the average. Flowers white, but yield a rich yellow dye. It is said to be abundant in Travancore. A specimen of wood sent by General Cullen, as of this tree, showed the grain and polish remarkably well: it was, however, of a brighter colour, and apparently of a denser quality than any met with in the market, inducing a doubt as to its being of the same species. It was stated to be abundant, 25 miles north-east of Trevandrum. It is found in the Mysore and Salem jungles in large quantities, also along the crest of the ghats from Travancore to Goa. In Coimbatore, it is a valuable timber tree of large size, and its reddish-coloured wood is used for cabinet-making purposes. It or an allied species is known also in Coimbatore under the name of Wunjooli maram; but, as this is a very heavy and strong hard wood, said to be admirably fitted for pestles and mortars and other purposes demanding great strength, but not for cabinet purposes, Dr. Wight suspected Roxburgh's toona and the Wunjooli to be different trees. Dr. Gibson reports that he had found this choice tree in one situation, viz., inland of Koorsulee; but adds, it probably exists all along close below the ghats. At another place, he says that it is not a common tree in the Bombay forests, but is found in some of the greenwood jungles about the ghats, and also in the hill range abutting on the Rajpooree Creek to the south. The wood is a choice one for cabinet purposes, but is not used for any others, except for house beams, when it is procurable in sufficient quantity. In the races of the south Konkan and lower Canara the tree is more common. It is, in as far as he was aware, never found inland. And, again, he says it grows abundantly in some of the deep ravines in western Kandeish, and it grows in the ravines of the Concan. In Ganjam and Gumsur, where it is known as Mahalimbo, its extreme height is 70 feet, circumference 5 feet, and height from the ground to the intersection of the first branch, 22 feet. Under this tree's name, Captain Sankey describes a Nagpore timber as averaging 10 to 12 feet long and 3½ to 4½ feet in girth, and selling at 16 annas the cubic foot. At the Tambur river, in East Nepaul, the vegetation in some spots is exceedingly fine, and several large trees occurred. Dr. Hooker measured a Toon tree (*Cedrela*) thirty feet in girth at five feet above the ground. Southwards, Lieut. Nuthall, as

CSL

quoted by Captain Munro, mentions toon as one of the woods of Arracan, under the name of "thit-ka-do." A tree is found, also, Dr. Brandis tells us, on the hills and on the plains of British Burmah, plentiful in some districts, and if not identical with the Toon of Bengal, certainly nearly related to it. A cubic foot of the Burmah wood weighs lbs. 28. In a full-grown tree on good soil the average length of the trunk to the first branch is 40 feet, and average girth measured at 6 feet from the ground, is 8 feet. It sells in Burmah at 8 annas per cubic foot. It will be seen from the above, that it has a wide range throughout India, common in the northern provinces, where it is made into furniture of all kinds, and is much admired for its close-grain and beautiful colour, resembling, though lighter than and not so close-grained as, mahogany, to which it is deemed equivalent. It is used all over India by cabinet-makers for furniture. It is called Bastard Cedar from an aromatic resin, exuding from it, resembling that of the American cedar. It is often sold in Madras under the general name of "Chittagong wood," and is the most valuable of the woods known by that commercial name. It has an erect trunk of great height and size, with smooth gray bark, The flowers are very numerous, small, white, and fragrant, like honey. The seeds are numerous, imbricated, winged. It seems probable that the trees known "commercially," as Toon are, at least, different species; but all the woods sold under this name, are red-coloured, of varying hues. The Gumsur "*Mahalimbo*" wood, said to be this tree, and to be tolerably common, is described as not liable to be attacked by insects, and is, on that account, used for making boxes, &c. The fruit and bark are used medicinally for fever and rheumatism. The bark is powerfully astringent, but not bitter. The native physicians use it in conjunction with the powdered nut of the Cæsalpinia bonducella, an intense bitter. M. Nees Von Esenbeck has published an account of some experiments on the bark, which indicated the existence of a resinous astringent matter, a brown astringent gum, and a gummy brown extractive matter, resembling *ulmine*. The bark was used in Java by Blume in epidemic fevers, diarrhœa, and other complaints. Horsfield gave it in dysentery, but only in the last stage, when inflammatory symptoms had disappeared. Its flowers, in conjunction with safflower (Koosumba) are used by the inhabitants of Mysore, for dyeing the beautiful red colour called there Gul-i-nari. —*Roxb.* i, 635. *Drs. Wight, Hooker, Mason, Gibson, Cleghorn, Stewart, Ainslie, O'Shaughnessy, McClelland, Lieut. Col. Lake, M. E. J. R., Captains Macdonald, Sankey, Mr. R. Thompson. Voigt.* 137.

CEDRELA TOONA *var* SERRATA, *Royle.*

Dimri.
Drab.
Drawi. } HAZARA.
Drawa.
Tuni. HIND.
Deri. PANJAB.
Chiti sirin. ,,
Der. CHENAB, LAHORE.

Dori. LAHORE.
Bisra. PANJ.
Guldar. ,,
Daral. } SUTLEJ, BEAS.
Darali.
Khishing. KANAWAR.
Khanam. ,,

The leaves of this are always saw-edged (serrated) in which alone it differs from C. toona *Roxb.* Its wood is often red, but is of more open texture and lighter in colour than C. toona, and stands water well. In Kanawar it is used for bridges, and in some places the hoops of sieves are made from it. The wood has a fœtid small when fresh: an ordinary leaf is 30 inches long.—*Dr. J. L. Stewart*, p. 34.

CEDRUS DEODARA, *Loud.*

Pinus deodara, *Roxb.*
Larix deodara.
Abies deodara.

Sacred Indian Fir. ENG.
Deodar. ENG. HIND.
Indian Cedar. ENG.
Himalayan cedar. ,,
Deva-dara. HIND.
Diar. HAZARS, KASHMIR & KAGHAN
Paluddar ,, ,, ,,
Palurr chilas.

Kelu, keli, keori, CHAMBA, &c.,
Chilas, KULLU, BEAS.
Kelon? HIND.
Kalain. DHAULADDAR RANGE.
Kilai ,, ,,
Nashtar. PERS. PUSHTU.

The lofty deodara, is a native of the Himalayas, and has an almost imperishable wood. Dr. Hooker is of opinion that it is identical with the cedar of Lebanon, and this view is generally concurred in.

It grows at 4,000 to 10,000 feet in many parts of the Himalaya from the Ganges to beyond the Indus at Safed koh, and the mountains north of Jellalabad. It is a very handsome tree, with a yellow coloured, easy worked, straight grained and durable wood, and pillars of it in the great mosque are said to be of the year 804 Hijri, but those on the hindu temples there are said to be 600 or 800 years old. Insects do not attack it. It is strong elastic and not too heavy. It is used for knees of boats and forall building purposes. A tree takes from 80 to 120 years to reach 6 feet of girth, attains a height of 100, 120 even over 200 feet, and girths of 25 to 42 feet. It is the best of all the Coniferous timbers. It yields a valuable empyreumatic oil.—*Dr. J. L. Stewart, p.* 221, *Royle, Ill. p.* 350, *Eng. Cyc.*, *Hooker's Him. Journal. See* CEDAR, CEDRUS, DEODAR.

CELASTRACEÆ. Spindle trees. ENG. The English name is derived from the use made of its very compact wood.—*John's Forest Trees of Britain, Vol. I., p.* 34.

CELASTRUS EMARGINATA, *Willde.*

This shrub, which grows on the Coromandel Coast, makes good fences and fuel.—*Voigt.*

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CELASTRUS MONTANA, *Roxb.* ; *W. & A.* ; *W. Ic.*

Catha montana, *Forsk.*

Kangunee. MAHR.
Mal Kangunee. ,,
Danti Chettu. TEL.
Gaja Chinno. TEL.
Gi-changi. ,,
Pedda danti. ,,

A scrubby, crooked shrub, found on the Coromandel Coast and in barren hills, chiefly of the Deccan. The wood, hard and durable, is sought after as a choice dunnage for roof tiles, said to last for forty years,—a duration greatly exceeding that of any other dunnage material.—*Gibson, Voigt.*

CELASTRUS NUTANS. In Kamaon, a large woody creeper. The wood is very durable and the long stems are used as twisting ties.—*Mr. R. Thompson.*

CELTIS CAUCASICA, *Willde.*

Nettle tree. ENG.
Karrak or kirki. KANGRA.
Kar. KANAWAR.
Kargam. PANGI.
Taghun or takpun. PUSHTU
Wathamman. SALT RANGE
Batkar. MURREE HILLS.
Kúrg. PANGI, &c.

This fine tree grows wild west of the Indus at 1,500 feet of elevation, and at from 2,500 to 8,000 feet in the Panjab Himalaya. Trees of 7 or 8 feet in girth are not uncommon, and one has been seen 16½ feet in girth. Its timber is white, light, soft, but weak, and is readily attacked by insects ; chiefly used for Zemindar's work, charcoal and fuel. Its bark yields a cordage.—*Dr. J. L. Stewart, Mr. Powell, Lieut.-Col. Lake.*

CELTIS ERIOCARPA.

Keoo. PANJAB.

The bark used for making shoes. Grows at 6,000 feet in the N. W. Himalaya.

CELTIS NEPALENSIS, *Planch.*

Batkan. PANJ.
Tagho. PANJ.

A rare tree west of the Indus and in the Jhelam basin, at 2,500 to 3,500 feet. Its wood is tough and is used for churn sticks.—*Dr. J. L. Stewart*, p. 210.

CELTIS TETANDRA.

Khurruk. HIND.
Khurreek. HIND.

Grows in Kumaon in swampy lands but not of large size.—*Mr. R. Thompson.*

CELTIS WIGHTII, *Planch.* A small tree in the hot drier parts of the island of Ceylon. It furnishes a very hard wood, light-colored and well worthy of attention.—*Major Beddome, quoted by Mr. Fergusson.*

CENTRAL PROVINCES or NAGPORE WOODS. Captain Sankey in 1852 reported on the forests of Nagpore. Since then, these forests have undergone material change, and as little was known then of the Jubbulpore forests, Major Pearson has obligingly furnished the following article on the Central Province Forests, in place of those in the 2nd Edition under heads, Jubbulpore Woods, page 139, and Nagpore Woods, page 175. A Forest Department was formed in the Central Provinces in 1860, extending only over what was then known as the Jubbulpore Division. Nagpore and Raepore were added to the charge in 1862. In 1862-63 there was a revenue of 53,000 Rupees, and in 1865-66 the assets of the year showed a sum of 4 lacs and 37,000 Rupees, or after deducting the amount of stock in hand and money due to the Department at the beginning of the year, a net revenue for the year of 2 lacs and 50,000 Rupees. The expenditure under this head during the year was Rupees 1,13,500. At the present time, the only forests in which teak of good size is procurable are, 1st, the forests of Boree, at the foot of the Puchmuree or Mahadeo Hills and those of Sowleegurh and Jamgurh in Baitool, 2nd, the forests around the Bormeyr river in Mundla, 3rd, the forests of Lohora, Konkeir and Panabarras, of which the latter is the centre, between Raepore and Chandah and, 4th, the forests of Aheree on the Godavery, between Seroncha and Chandah. The two last named belong to Zemindars, the two first only are Government property. There is also teak found of large size in the Gurjat States, 120 to 150 miles south-east of Raepore ; but it is so remote that it can hardly be counted among the available timber resources of the country. It is believed, however, not to exist in any extraordinarily large quantity—indeed Lieutenant Forsyth's report on the Kurriar forests represents 12,000 trees in all. In Boree, including the Baitool forests, (which latter however, are practically speaking, worked out) there may be 10,000 available timber trees. In Mundla there are about half that number remaining. In the forests of which Panabarras is the centre, there is still practically a perpetual supply, if only they are worked with care, as a vast supply of trees are there found in every stage of growth. About Dorwa in Panabarras alone he calculated there were 10,000 trees available for felling, and 30,000 more from two feet to two and a half feet in girth, all fine promising young trees. The Aheree forests are leased out to a Sett at Hyderabad for twenty years—four years of the lease being yet to run. In the two last localities only, viz., Panabarras and Aheree, does the teak seem to attain the size it does in Malabar or Burmah. The size of the best trees in Mundla or Boree does not exceed a maximum of six feet in girth, while the average girth of full-grown trees is not above four and a half feet in girth, and the length of the logs eighteen to twenty-five feet. In Panabarras however he had measured trees up to fifteen feet in girth, and which would have given a log sixtyfeet in length. Trees of from eight to twelve feet in girth are common, and even in the hills, trees above six feet in girth abound, and the timber is equally fine in Aheree. In addition to the above, there is now, since it has been conserved, an ample supply of fine young teak coming on in the Central Provinces and Berar. The best is that found in the Taptee valley below the Chickulda hills; along the Satpoora, north of Nagpore, about Korye and Koomerpanee, in Baitool and Mundla. Besides teak, the Saul forests of the Central Provinces are very considerable; in fact they cover a large portion of the surface of the country east of 8° 30″ east longitude, commencing from the latitude of Beejoragogurh, 70 miles north by east from Jubbulpore, and extending as far south as Bustar. Lieutenant Forsyth reports as follows:—"Indeed the great belt of Saul, which, beginning in the Rewah State, runs across to Mundla and covers the Meikul range of hills, stretches in an almost unbroken expanse over the whole of the country lying to the north of the Ghât line that bounds the fertile plain of Ruttempoor on the north, comprising the Zemindaries of Paindra, Kainda, Laafa and Matin, west of the Husdoo river, and Koorba and Uprodah east of it. Thence it appears to continue eastward, covering the hilly country north of the Mahanuddee valley in the Raighur State, and the British territory of Sumbulpore, and sweeping around to the south by Bamra and Redacole, it re-appears south of the Mahanuddee and covers the greater part of the Gurjat States of Patna, Khurriar, and Bindra Nowaghur. Following northwards again the line of the Jonk river, it forms the principal feature of the forests of Pooljer, Sarunghur, and the Raepore District in the neighbourhood of that river (*Vide* Lieutenant Forsyth's Report, 1st July 1864.)" From the distance of the forests and excessive weight of the timber, Saul does not come much into use. There is, however, a fine forest (a solitary patch) in the Daniwah valley at the foot of the Puchmurree hills, which now is being worked, and the Executive Engineers at Jubbulpore and Saugor supply themselves with this timber from the Rewah State, 50 or 60 miles east of Jubbulpore, and from the government forests in Beejoragogurh. Of all other timbers, good, indifferent, and many of them bad, the demand for sleepers for both branches of the Great Indian Peninsula Railway, east of Bosawul, has almost cleared the forests within 50 miles of the railway lines of every tree which would yield a sleeper—nor, has the supply of them done much good, as very few years will elapse before all have to be replaced. This is being done partly by Saul, in a very small degree by teak, but chiefly by iron pot sleepers. For the rest, the jungles of these Provinces, which present an area of as 7 to 1 to the cultivation, are generally a dense thicket of scrub and bamboos, often containing, over an immense area of space, not a tree of any value whatever. Major Pearson has travelled in places 50 and 60, nay 90 to 100 miles, with scarcely finding an open space to pitch his tent, and yet seen no tree except the Boswellia, Odina woodier, and perhaps a scattering of Terminalia and Pterocarpus, which could deserve the name of a tree, yielding timber of a useful size, without going into the question of quality at all. The following may be offered as a tolerably correct list of the trees of these forests (except the Lower Godavery and Bustar) most of them having been verified personally by Dr. Brandis, Inspector General of Forests in India.

Teak ..	Tectona grandis.
Saul.. ..	Vatica robusta.
Beejasal	Pterocarpus marsupium.
Rohnee ..	Soymida febrifuga.
Saj ..	Pentaptera tomentosa.
Kowah ..	Pentaptera arjuna.
Hurra..	Terminalia chebula.
Beherah..	Do. bellerica.
Siris (seris)	Acacia sirissa.
Baubul ..	Acacia Arabica.
Reunjah	Acacia leucophlœa.
Khair ..	Acacia catechu.
Goorhar	Acacia procera.
Kossum..	Schleichera trijuga.
Tendoo	Diospyros ebenum.
Salee ..	Boswellia thurifera.
Gooloo	Sterculia urens.
Damin ..	Grewia tiliæfolia
Pullas or Dhak	Butea frondosa.
Hurdoo ..	Nauclea cordifolia.
Kuddum	Nauclea orientalis.
Kaim ..	Nauclea parviflora.
Mokah	Schrebera Swietenioides.
Moheen..	Odina woodier.
Sewun..	Gmelina arborea
Lendya ..	Lagerstrœmia parviflora.
Mowah	Bassia longifolia
Sheshum.	Dalbergia latifolia.
Tinnus ..	Do. Oojeinensis.
Errool ..	Inga xylocarpa.
Jamin..	Eugenia jambolana.
Bhiriya (Satinwood)	Chloroxolon Swietenia.
Bher.. ..	Zizyphus jujuba
Mango	Mangifera Indica.
Neem ..	Melia azadirachta.
Koombhee..	Careya arborea.
Semul ..	Bombax Malabaricum.
Imlee..	Tamarindus Indica.
White Sandalwood..	Santalum album
Bilahwah ..	Semicarpus anacardium.
Toon ..	Cedrela toona.
Putting	Cæsalphinia sappan.
Wood Apple ..	Feronia elephantum.
Bel ..	Ægle marmelos or Feronia pellucida.
Dowrah..	Conocarpus latifolia.
Unjun..	Hardwickia binata.
Bukkain..	Melia bukkain.
Cheroonjee.	Buchanania latifolia.
Aonla ..	Phyllanthus emblica.
Papra..	Gardenia latifolia.
Kharee ..	Uvaria tomentosa.
Peepul..	Ficus religiosa.
Banyan...	Ficus indica.
Goolar..	Ficus glomerata.
Dengun ..	Cordia Macleodii
Jumrapee..	Elæodendron paniculatum.
Dobeyn ..	Acacia paniculatosa.
Kurdahee ..	Conocarpus mystifolius.
Astar ..	Bauhinia racemosa.
Keolar..	Bauhinia.
All or Bartondii..	Morinda citrifolia.
Rugutrora.	Rhamnus Wightii or Tecoma undulata
Gondi ..	Cordia angustifolia.
Lussora	Cordia myxa.

—*Major Pearson.*

CEPANTHES MARA, the Mara of Tahiti is an elegant tree attaining the height of 40 to 50 feet and a circumference of 5 to 8 feet. It yields a hard wood, used for the keels of vessels, boats, &c.—*Bennett's Gatherings*, p. 400.

CERASUS PUDDUM.

Prunus puddum.

Bird-Cherry Paddam. HIND. | Amalguch of Kaghán.
Chumyári of Murree Hills. | Pájá of Kotgurh.

It grows at from 3,000 to 7,000 feet. Wood hard and close-grained, of a reddish colour, procurable 15 to 20 inches in circumference, occasionally used for furniture, and makes excellent pipe-sticks. It is found as far west as the Indus. The fruit is sold in Simla bazar. The Cerasus communis, a congener of this, probably yields the "gilás," or Kashmir cherry, and the "árubálú" or Kábul cherry.—*Mr. Powell, Hand Book, Dr. Stewart.*

CERASUS VULGARIS, MILL.

Gilas. HIND. | Alu-balu. PASHT. PANJ.

The cherry is not cultivated by natives, and has always failed with Europeans in the plains of the Panjab. In Kashmir, the tree is commonly cultivated, and some are good, both sweet and bitter, the latter excellent for cherry-brandy. Cherries are cultivated at Kandahar (Bellew) and at Kábul. Masson states that three varieties were introduced by Baber as recorded in his Memoirs. The wild tree is said to be a favourite at Kábul and Kandahar, being planted for the sake of its white blossoms.—*Dr. J. L. Stewart, M. D.*

CERBERA MANGHAS, *Linn.*

C. lactaria, *Buch.* | C. quaternifolia, *Roxb.*
Kulloon. BURM.

This tree grows in wet situations in Pegu, Tenasserim, Tavoy, Penang, Singapore, Java, Moluccas, and the adjacent islands. The wood is said not to be used. Its fruit is used very extensively by the Burmese, to make an oil which they burn in their lamps and use to anoint their heads. The kernels are described as emetic and purgative. The leaves are said to be used in Java as a substitute for senna, and the bark is said to possess similar properties.—*Voigt, Dr. Mason, Eng. Cyclop.*

CERBERA ODALLAM, *Gært.* 192.

Gon-kadura. SINGH. | Kadoo-ma. TAM.

Grows in Ceylon, near the coast, often planted as a fence tree. Wood soft and white, used for charcoal.—*Fergusson.*

CERESE. HIND.? A reddish-coloured, hard and close-grained strong wood, found in the Santhal jungles from Sooree to Hasdiha, but scarce. Used by the natives for buildings, furniture, cart-wheels, &c. Suitable for the construction of timber bridges.—*Cal. Engineers' Journal, July* 4, 1860, p. 155.

CEYLON WOODS. The late Sir George Anderson sent to me, for the Madras Museum, the following specimens of the principal timber trees of Ceylon, collected by Mr. Adrian Mendis, Mohandiram of Moorrotto, and Master Carpenter, Royal Engineer's Department.

Acacia vera. Andere.
Adenanthera pavonina. Madetiye.
Agimea.? obliqua Kebelle.
Almond. Cottamba.
Anisophyllum zeylanicum. Welipiyanna. ? ? ?
Areca nut. Puwak.
Artocarpus, sps. Patta Del.
,, integrifolia. Cos. Jack.
Artocarpus pubescens. Del.
,, ,, Aludel.
Bairiye.
Bassia longifolia. Mee.
Bauhinia tomentosa. Petan.
Bead tree, Common; Lunu Midelle
Berrya ammonilla. Hal Milile.
Borassus flabelliformis. Tal. Palmyra.
Butea frondosa. Calukeale.
Calophyllum acuminatum. Waldombe.
Calophyllum calaba. Gorrukeenee.
Calophyllum, Sweet scented; Dombe.
Calyptranthes cumini. Mahadan.
Calyptranthes. Clove-tree leaved. Battedombe.
Calyptranthes Jambolana. Alubo.
Careya arborea. Kahatte.
Carillia zeylanica. Davette.
Caryota urens. Kittool. Nepera.
Cassia cinnamomum. Dawol kurendoo.
Cassia Sumatrana, Arremene.
Choecarpus pungens. Hedde woke.
Chloroxylon. Satin. Burute.
Chloroxylon. Flowered Satin, Mal burute.
Cicca distica. Nelly.
Cocatiye.
Cocos nucifera. Cocoanut.
Cratæva religiosa. Wea warene.
Cynometra, Branch-flowered. Hal mendora, or Gal mendora.
Dalbergia lanceolaria. Nendoon.
Daminne.
Dillenia, Toothed, Gode parre.
Diospyros hirsuta, Calamander. Calu Medirlye.
Dipterocarpus, Turbaned, Horre.
Dipterocarpus, sp. Doon.
Dive parre.
Ebony. Caluvere.
Ebony, Bastard Kadoembeiriye.
Echites, Lance-leaved, Kiri walla.
Echites scholaris. Book attene.
Embryopteris glutinifera. Timbery.
Eugenia laurina. Walboamboo.
Ficus Indica. Indian fig tree. Kiripelle.
Grewia paniculata. Hunukirille.
Hibiscus, Tilia-leaved. Beligobel.
Illicebrum latrum. Nerreloo.
Iron wood. Naw.
Jonesia asoca. Dive ratembela.
Katie Kale.
Lagerstræmia regina. Murute.
Limonia citrifolia. Pamburoo.
Melia, sp. Hulanhick.
Millingtonia, sp. Ramoneidelle.
Michelia champaca. Sappoo.
Mimosa. Sooriva mara.
Mimusops elengi. Moonemal.
Mimusops hexandra. Paloo.
Morre, Eye ball.
Murraya, Ash leaved Etteiriye.
Nauclea parviflora. Helembe.
Nebede.
Nephelium, sp. Gal morre.
Oak. Ceylon Koang.
Olax zeylanica. Melle.
Patkeale.
Penebarroo.
Persian. Sooriya.
Pterospermum ruberifolium. Velenge.
Rhizophora, sp. Hirikaddol.
Rhizophora. Leafy mangrove Cadol.
Rhus decipium. Pehimbive.
Rottleria, sp. Otte.
Sapota, sp. Lawoloo.
Spathodea. Long-flowered Daanga.
Sterculia fœtida. Telemboo.
Suvande.
Tamarindus Indicus. Siyembela.
Tectona grandis. Taik-ke celemey. Ceylon Teak.
"Taikke Cotchiye, Cochin Teak."
"Taikke Molmine. Maulmein Teak."
Ukbeiriye.
Vateria Indica. Hal.
Vitex trifoliata. Caha milile.
,, ,, Mecan
Vitextrifoliata. Sappoomilile
Vitmannia trifoliata. Samadera.
Walukeene.
Webera cerifera. Tarrene.

In the above list, are several evidently incorrect botanical names in so far as they can possibly be timber trees; and others cannot be traced to other authority, but the woods sent with them were all valuable and many of them very beautiful. Subsequently, about the years 1862-63, Mr. Thwaites issued his very valuable enumeration of Ceylon plants, in which mention of the timber trees was made. In the year 1863, Mr. Fergusson issued a very valuable work exclusively on the Ceylon Timber Trees, of which the following are the botanical names. The numbers of trees that he noticed are 376.

Acacia Arabica
„ Catechu
„ Eburnea
„ Leucophlæa
„ Tomentosa
Acmena Zeylanica
Actinodaphne Speciosa
Adansonia digitata
Adenanthera bicolor
„ pavonina
Aegle marmelos
Aegiceras majus
Æschynomene Aspera
„ Indica
Ailanthus Malabaricus
Alangium Lamarkii
Albizzia amara
„ Lebbeck
„ Odoratissima
„ Procera
„ Stipulata
Ailanthus Zeylanicus
Alseodaphne Semicarpifolia
Alstonia Scholaris
Amanoa patula
Anacardium Occidentale
Anagyris fœtida
Anisophylla Zeylanica
Anstrutheria Zeylanica
Antiaris innoxia
Antidesma Bunias
Apollonias Zeylanica
Aporosa latifolia
„ Lindleyana
Aralia papyrifera
Areca Catechu
„ Dicksonii
„ Globulifera
„ Horrida
Artocarpus nobilis
„ incisa
„ integrifolia
„ Lakoocha
„ pubescens
Aspidium arboreum
Atalantia monophylla
Avicennia officinalis
Azadirachta Indica
Balanophora Indica
Balsamodendron
Bambusa arundinacea
„ nana
„ spinosa
„ stridula
Barringtonia acutangula
„ Speciosa
Bassia latifolia
„ longifolia
Bauhinia tomentosa
Berrya Ammonilla
Blackwellia Ceylanica
Bœhmeria Malabarica
Borassus flabelliformis
Briedelia Moonii
„ retusa
Bruguiera
Butea frondosa
Calamus Rotang
Callicarpa tomentosa
Calophyllum Burmanni
„ Inophyllum
„ Moonii
„ tomentosa
Calosanthes Indica
Cameraria oppositifolia
„ Zeylanica
Campnospermum Zeylanicum
Canarium Zeylanicum
Canthium didymum
Caralia integerrima
Careya Arborea
Caryolobis Indica
Caryota horrida
„ mitis
„ urens
Cassia auriculata
„ Fistula
„ florida
„ Timoriensis
Casuarina equisetifolia
Catalpa longissima
Celtis dysodoxylon
„ Wightii
Cerbera odollam
Ceriops
Chœtocarpus castanocarpus
„ coriaceus
Chickrassia tabularis
Chionanthus Zeylanica
Chloroxylon swietenia
Chrysophyllum Roxburghii
Chuncoa Muttia
Cinnamomum citriodorum
„ litsæœfolium
„ Zeylanicum
Cleidion Javanicum
Cluytia patula
Cocos nucifera
Combretum decandrum
Conocarpus latifolia
Cordia Myxa
Corypha umbraculifera
Cratœva Roxburghii
Cryptocarya floribunda
„ Wightiana
Cullenia excelsa
Cyathea arborea
Cyathocalyx Zeylanicus
Cyminosma pedunculata
Cynometra ramiflora
Dalbergia Mooniana
„ Lanceolaria
„ Sissoo
Dasyaulus neriifolius
Desmostemon Zeylanous
Dialium ovoideum
Dichrostachys cinerea
Dillenia retusa
Dimorphocalyx glabellus
Diospyros Acuta
„ Affinis
„ Attenuata
„ Candolleana
„ Cordifolia
„ Crumenata
„ Ebenum
„ Embryopteris
„ Gardneri
„ Hirsuta
„ Insignis
„ Melanoxylon
„ Moonia
„ Oocarpa
Diospyros Oppositifolia
„ Ovalifolia
„ Quesita
„ Sylvatica
„ tomentosa
„ Toposia
Dipterocarpus glandulosus
„ hispidus
„ Zeylanicus
Dodonœa Burmanniana
Doona congestiflora
„ cordifolia
„ nervosa
„ trapezifolia
„ Zeylanica
Dysodidendron
Ehretia lœvis
Erythrina Indica
Eugenia (S) cordifolia
„ mooniana
„ Willdenovii
Euphorbia tirucalli
Eurya Japonica
Euterpe montana
Evia amara
Excœcaria Agallocha
Feronia Elephantum
Filicium decipiens
Fissicalyx ——— ?
Gœrtnera Kœnigii
Gamboge
Garcinia Cambogia
„ echinocarpus
„ Morella
Gardenia latifolia
Gelonium lanceolatum
Gironiera reticulata
„ subœqualis
Givotia rottleriformis
Gmelina Rheedii
Gomphia angustifolia
Grewia tilliœfolia
Griffithia Gardneri
Guazuma tomentosa
Gyrinops walla
Gyrocarpus Asiaticus
Hedera exaltata
Hemicyclia lanceolata
„ Sepiaria
Hernandia Sonora
Heritiera littoralis
Holarrhena mitis
Hopea discolor
Hunteria Zeylanica
Hymenœa verrucosa
Ilex Wightiana
„ Denticulata
„ Gardneriana
Isauxis Roxburghiana
Isonandra grandis
Ixora parviflora
Jambosa aquea
Jonesia Asoka
Kayea Stylosa
Kokoona Zeylanica
Kleinhova hospita
Kurrimia Ceylanica
Lagerstrœmia Reginœ
Laportea crenulata
Lawsonia alba
Ligustrum robustum
Limonia Missionis
Littsœa Zeylanica
„ Trinervia
Lumnitzera racemosa
Maba buxifolia
Machilus macrantha
Macaranga tomentosa
Macrocladus Sylvicola
Mœsa Indica
Mangifera Indica
Melia composita
Memecylon capitellatum
„ umbellatum
Mesua coromandelina
„ ferrea
„ Speciosa
Michelia Nilagarica
„ Champaca
Millingtonia hortensis
Mimusops Elengi
„ Hexandra
„ Indica
Mischodon Zeylanicus
Morinda bracteata
„ exserta
„ umbellata
Morocarpus longifolius
Murraya exotica
Myrtus androsœmoides
Nauclea coadunata
„ Cadamba
„ Cordifolia
Nephelium Longanum
Nyctanthes arbortristis
Ochna Moonii
Ochrosia Borbonica
Odina Wodier
Olea dioica
Paritium tiliaceum
Palenga Zeylanica
Pentaptera tomentosa
Phoberos Gœrtneri
Phyllanthus Emblica
Pisonia oleracea
„ alba
„ macrophylla
„ morindifolia
Pistacia Vitex
Pithecolobiumbigeminum
„ dulce
Pleurostylia Wightii
Pongamia glabra
Premna latifolia
„ herbacea
„ tomentosa
Prosopis Indica
„ cyanospermum
Protium caudatum
Pterocarpus Indica
„ Marsupium
Pterospermum Indicum
„ suberifolium
Pygeum Ceylanicum
Pyrularia Wallichiana
Putranjiva Roxburghii
Rhizophora
Rottlera digyna
„ oppositifolia
„ tetracocca
Salmalia Malabarica
Salvadora Wightiana
Samadera Indica
Santalum album
Sapota elengioides
Sarcococca pruniformis
Scœvola Plumieri
Schleichera trijuga
Schrebera Swietenioides
Scyphostachys coffeoides

GSL

Se[illegible]nia Dicksonii
,, oryzæformis
Semecarpus
Serissa Ceylanica
Sethia Indica
Shorea oblongifolia
,, Stipularis
Sonneratia acida
Spathodea adenophylla
,, Rheedii
Sponia orientalis
Sterculia fœtida
Stereospermum chelonoides
,, Suaveolens
Streblus asper
Strychnos nux-vomica
,, potatorum
Stylocoryne webera
Swietenia febrifuga
Symplocos spicata
Syzygium androsœmoides
,, caryophyllifolium
,, Neesianum
,, polyanthum
,, Sylvestre
Tabernœmontana dichotoma
Tamarandus officinalis
Terminalia alata
,, Bellerica
,, Chebula
,, Glabra
Terminalia parviflora
Terpnophyllum Zeylanicum
Tetrameles nudiflora
Tetranthera Gardneri
,, iteodaphne
,, ligustrina
,, ovalifolia
,, Roxburghii
,, tomentosa
Thespesia populnea
Timonius lambosella
Tomex-tomentosa
Ulmus integrifolia
Uncaria Gambier
Urostigma Benghalense
,, religiosum
Urtica aquatica
,, Stimulans
Vateria Indica
Vernonia Javanica
Vitex alata
,, arborea
,, altissima
,, leucoxylon
,, pinnata
,, pubescens
Walsura piscidia
Wendlandia Notoniana
Wrightia coccinea
Xanthocymus ovalifolius
Xanthoxylon Rhetsa
,, triphyllum
Zyzyphus Jujuba

CHADACHEY. Tam.? A small tree of Palghat, wood of a light-brown colour, used for buildings and carts.—*Colonel Frith.*

CHÆTOCARPUS CORIACEUS, *Thw.*

Hœdoka. Singh.

In Ceylon common, and timber good.—*Fergusson.*

CHÆTOCARPUS CASTANOCARPUS, *Thw.* 275.

Hœdoka. Singh.

A well known Ceylon timber tree, very common from Colombo to Ratnapoora and Ambegamoa, and in India it is a large timber tree with hard wood.—*Fergusson.*

CHAHOONG? A tree of Akyab, grows to a moderate size, and is plentiful in Ramree and Sandoway districts. Used in house-building. (Qu. Is this Chakoong? or the Cordia myxa?)—*Cal. Cat. Ex.* 1862.

CHAILE. Hind.? A tree of Chota Nagpore, furnishing a hard, white, grey timber.—*Cal. Cat. Ex.* 1862.

CHAKOLTI. Hind.? A light, pale-yellow coloured wood, not strong. Plentiful in the Santhal jungles from Raneebahal to Nonihaut or over a distance of about thirty-five miles. Native furniture, tables, palkees, venetians and doors are made from this wood.—*Cal. Engineers' Journal, July* 1860.

CHALL. A Panjab tree. The same as the "Chitta" or white Dhaon; wood white, hard, tough, liable to bend; yields small timber, fit only for zemindars' houses; held in great request for ploughs, on account of its durability. Leaves used for dyeing leather. The gum from the tree is extensively employed in printing on cloth; the leaves of this tree are long and narrow, and the colour of the fruit when ripe is yellowish; the bark is white.—*Lieut. Col. Lake, Commissioner, Jullundur Division.*

CHAMBA. A Panjab tree, which Lieut. Col. Lake says, seems identical with the "Michelia champaca" in *Balfour, page* 166, and is mentioned in *para.* 153 *of Mr. Barnes' Kangra Settlement Report.* It attains full growth in about 40 years (some say 25), when it is useful for timber. Average length of trunk 20 feet, and average circumference 6 feet; grows straight, and has a yellow sweet-scented flower, the seeds of which, being also fragrant and oily, are bruised and rubbed over the body as a perfume. The wood of the tree is fine grained, of a yellow colour, hard, of moderate gravity, not subject to worms, nor liable to warp; yields good timber. The flowers are offered at the shrines of the hindoo divinities.—*Lt. Col. Lake, Commissioner, Jullundur Division.*

CHAMÆROPS, a genus of Asiatic palms, some species of which furnish useful products, but no timber.

CHAMÆROPS EXCELSA, a palm of Northern China, the brown fibre surrounding its trunk is employed for many domestic purposes, and for ropes and cables.—*Seeman.*

CHAMÆROPS RITCHIANA, *Griffiths.*

Maizurrye. Pushtoo. | Pfees. Sindi.

Grows in masses below five thousand feet on the barren hills and passes, leading up into the table-land of Beloochistan and Affghanistan. Its leaf-bud or cabbage is eaten. Its scurf with saltpetre, used as match for the matchlock. Its wood for fuel, and its leaves "*phurra*," are fabricated into baskets, fans, brushes, sieves, sandals, pouches, platters, and ropes for water-wheels.—*Seeman.*

CHANGAL. Hind.? CHAMPAC. Hind.? A moderate-sized tree of Akyab, not plentiful. Wood used for making boats.—*Cal. Cat. Ex.* 1862.

CHANNEE. Tam.? A tree of Travancore; wood of a brown colour, used for oil-mills, &c.—*Col. Frith.*

CHANNY MARAM. Tam.? A tree of Travancore; wood of a brown colour, used for building common houses.—*Col. Frith.*

CHANNY VENGAH. Tam.? Travancore; wood of a light-yellow colour, one to six feet in circumference, used in house-building.—*Col. Frith.*

CHARCOAL.

Zughal. Ar.
Fahm-chobi. Ar. ??
Mi[illegible]wa. Burm.
Koelh. Duk.
Carbon also Charcoal. Eng.
Wood charcoal. ,,
Charbon. Fr.
Charbon de bois. Fr.
Kohlenstoff. Ger.
Reine kohle. ,,
Ku-e-la. Guz.
Koela. Hind.
Kolsa. Hind.
Carbone de legna. It.
Carbonium. Lat.
Carbo-ligni
Arang-bara. Malay.
Zeghal-i-chobi. Pers.
Lippe-anghoru. Singh.
Carbon de lena. Sp.
Adapu carri. Tam.
Karri ,,
Bogu. Tel.
Poibogulu. Tel.

In the south and east coast of Asia, where coal is found only in a few localities and the cost of carriage is great, charcoals are in great request, and attention to the modes of preparing them is of much consequence. In the peninsula of India, the common native mode is to set on fire a heap of small wood and, after allowing it to burn for some time, to quench it either by water or by heaping earth upon it ; but charcoal so prepared is of little value in reducing iron ore, and the process is wasteful. In various parts of the country, there are slight differences in the mode of preparation, but all are faulty and objectionable in an economical point of view. It is therefore, of great importance to India that more economical modes of preparing charcoal should come into general use, the destruction of firewood in the neighbourhood of iron works being grossly wasteful. Indeed, between the loss in preparing the charcoal and the loss of heat in preparing the iron, the consumption of the fuel is probably, at least, ten times as great as it ought to be, inducing great loss and in many cases rendering useless extensive beds of most valuable ore. Native iron smelters only employ fuel from one to three inches in diameter ; and, to procure this, they take saplings, or the tops and branches of the largest hard wood trees, allowing the trunks to decay. For, large trees are not adapted for fuel for native smelting, as the cost of splitting them adds greatly to the expense ; and, unless the logs are split, the inner wood is not carbonised. Charcoal, to be good, should be of wood burned with as little exposure to the action of the air as possible and be black, brittle, easily pulverised, perfectly insipid, solid, and inodorous. Charcoal is mostly used as a fuel, and in the manufacture of gunpowder. For the forge, the best is that prepared from bamboos and from stems of palmyra leaves (*Tel.*, Tati komaloo). The Tamarind yields a good charcoal for the same purpose, as do most hard woods. But the charcoal of the Acacia sundra is said to be amongst the best for this purpose. For gunpowder, the roots of the milk hedge, Euphorbia neriifolia, and of the Calotropis gigantea is preferred. At the Government Powder Mills, Madras, that of the gram bush, Dolichos uniflorus, and, in those of Bengal and Bombay, the Cajanus indicus or pigeon pea, is used. Charcoal used for gunpowder manufacture is generally made from small shrubs or herbs as the Vitex and Cajanus, also from the mudar, Calotropis gigantea and Parkinsonia aculeata, the Parkinsonia being said to yield a very good charcoal for gunpowder, though the charcoal considered the best, for gunpowder is manufactured from the Sesbania Ægyptiaca. The gunpowder charcoal used at the Damoodah coal works is made from an *Acacia :* the Sikh employed *Justicia adhatoda,* which is also in use all over India : at Aden the Arabs prefer the *Calotropis,* probably, because it is most easily procured. The grain of all these plants is open, whereas, in England, closer-grained and more woody trees, especially willows, are preferred. The best charcoal for a dentifrice, is that of the betel-nut. Charcoal possesses remarkable antiseptic properties, as it resists the putrefaction of animal matter, and destroys the smell and colour of many substances.—*Messrs. Faulkner, Rohde, Dr. Cleghorn, McCulloch's Dict.,* p. 266, *Mr. Wall's Report in G. O., 17th July, No.* 1040 *of* 1859, *Hooker's Him. Jour., Vol.* 1, *page* 9.

CHARLOMBI. The Tamil name of a Ceylon tree which grows to about fifty feet high, and twenty inches in diameter. It is very close-grained and light, and resembles some kinds of mahogany. It is used in house-work, &c. ; the fruit which it produces is of little value,—*Edye, Ceylon.*

CHAULMOOGRA ODORATA.

Taliennoe. Burm.
Chaolmugra. Hind.
Petarcura. Hind.

This is a native of India, but, there are a few trees about Rangoon, and it is also met with on the banks of streams in the Tounghoo Forests, though it must be considered scarce. Its wood is adapted for fancy work and cabinet-making. Its seeds are medicinal, being beaten up with ghee into a soft mass and applied three times a day, to cutaneous diseases. They yield 10 per cent. of oil by expression, and it has been similarly used. The seeds have been recommended for tapeworm, and an ointment, prepared from the seeds, is a favorite application among native practitioners for the treatment of several cutaneous diseases, especially herpes and tinea.—*O'Shaughnessy, Beng. Phar.,* p. 382, *Dr. McClelland, Honigberger.*

CHAURIOCHO. Hind. ? A tree of Chota Nagpore, yielding a hard wood.—*Cal. Cat. Ex.* 1862.

CHENA ; in Ceylon, the destructive form of cultivation, known as Kumari, on the

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western coast of India, *see* Kumari.—*Dr. Cleghorn.*

CHEE-NEB. Burm. Stinking Wood. Eng.

This wood, of maximum girth 4 cubits, and maximum length 22½ feet, is abundant in Tavoy and Mergui. When seasoned, it sinks in water. The flowers of this wood have an intolerably fetid sickening smell, hence its name ; it is used by the Burmese for boxes, tables, &c., and is a long fibred tough wood when new, but rots so readily that, with a whole tree in Captain Dance's possession, he could not cut out a decent specimen.—*Captain Dance.*

CHE-NEB-ROON. A tree of Akyab used in house-building. Grows to a large size, and is plentiful in the Ramree and Sandoway districts.—*Cal. Cat. Ex.* 1862.

CHENNAT NAIR, a forest near Palghat, which furnished a large supply of well-grown Terminalia glabra, Pterocarpus marsupium, and Inga xylocarpa.

CHERNDOO or Durindhoo. A small Panjab tree ; wood white, soft and brittle ; used for fuel, and the small wood-work in Zemindars' houses.—*Lieut. Col. Lake, Commissioner, Jullundur Division.*

CHERRO CANNY. Tam. ? A light brown coloured wood of Travancore, only used for firewood.—*Col. Frith.*

CHERRO NALAMPELLA. Tam. ? A light-brown coloured wood of Travancore, specific gravity 0·483, used for making canoes.—*Col. Frith.*

CHERROPOONA. Tam. ? A dark-coloured wood of Travancore, used for building houses.—*Col. Frith.*

CHEROTANNY. Tam. ? A light colour of Travancore, used for firewood.

CHERROTIMBA. Tam. ? A dark-coloured wood of Travancore, specific gravity 0·843. About 3 feet in circumference, used for house-building, tools, &c.—*Col. Frith.*

CHERRO VUNJEE. Tam. ? A Travancore wood of a brown colour, specific gravity 0·644. Used for firewood.—*Col. Frith.*

CHERRY TREE of Norfolk Island. The bark of this tree is used for tanning, and it furnishes one of the most useful woods. It is decreasing rapidly by being stripped of its bark, and so left to perish.—*Keppel's Ind. Arch., Vol. II, p.* 282.

CHICACOLE. The sea face of the mountains, in this district, does not contain any tree vegetation which can be denominated timber.—*Dr. Cleghorn's Report.*

CHICKRASSIA TABULARIS, *Ad. Juss.*

Swietenia chickrassa, *Roxb.*

Chikrassi.	Beng.	Deodar.	Eng.
Yimma.	Burm.	Pubha.	Mahr.
Zimma.	,,	Pabba.	,,
Dul mara.	Can.	Hulan hick-gaha.	Singh.
Dal mara.	,,	Agle maram.	Tam.
Bastard cedar.	Eng.	Chittigong chettu.	Tel.
Chittagong wood.	,,	,, karra.	,,
Cedar.	Eng.		

This tree occurs in the mountainous countries to the East of Bengal. It was discovered by Mr. Nimmo on the Toongur Hills, in 1838. It occurs also in Coimbatore, where, in common with one or two other light-red coloured woods, it currently passes under the general name of cedar and bastard cedar, and all are extensively employed in cabinet-making. This has quite a cedar-like smell. The wood is well known in Madras and easily procured, it is light-coloured, close-grained and beautifully veined, and is extensively used in cabinet-making, coming under the denomination of "Chittagong wood," being imported from that province, though it is abundant in the mountainous parts of the Peninsula. It makes beautiful and light furniture, but is apt to warp during the season of hot land winds. According to Dr. Gibson, it is a fine straight-growing tree, rather common in the southern jungles of the Bombay Presidency, but much less so in the northern. Its wood could be creosoted easily. It is used in the Madras Gun Carriage Manufactory to make plane tables and for furniture work. It furnishes one of the Deodars of Malabar. It is found, also, in Canara and Sunda, in the tall jungles near or on the ghats, particularly at Gunesh Kund. Wood, there, whiter, but tough and close-grained ; and, from its general situation, it is hardly known to the carpenter. Dr. Brandis tells us that there is, scattered throughout the forests on elevated ground in British Burmah (large trees are scarce), a tree either identical with "Chittagong wood" or nearly related to it. A cubic foot of it weighs lbs. 24, and in a full-grown tree on good soil, the average length of the trunk to the first branch is 80 feet, and average girth measured at 6 feet from the ground is 8 feet. This wood was not known to Mr. Rohde as a product of the Northern Circars, but was imported there among the "Chittagong woods." Beautifully veined and mottled pieces, he says, are occasionally met with, but its complaints during the season of the hot winds and dry northerly winds of November and December, in the Northern Circars, render articles made of it, containing wide planks and framing, as armouries, very disagreeable bed-room companions. The Chittagong-wood, he adds, is used at Madras for all purposes for which ordinary mahogany would be used in Britain, as furniture, panels of carriages, &c., and one variety is sufficiently tough to be employed for felloes of wheels. Mr. Rohde concludes that all the wood imported under the name of "chittagong" is not the produce of the same tree, the only wood of the Circars at all resembling it is the "pinna ayeinpa" of Ganjam and northern parts of the Vizagapatam districts. Indeed, it would be difficult, so far as his recollection enables him to state, to distinguish one from the other, though he believes it to be from a species of neem, *Melia azaderachta*. These remarks will show that the wood of the Chickrassia tabularis, enters the market indiscriminately, as one of the cedars, bastard cedars, deodars, and Chittagong woods, and that several woods are known in the market under the name of Chittagong wood, though seemingly all possessing a similarity of character which prevents them being distinguished, and allows of them all being used for one another—*Mr. Rohde, Drs. Gibson, Wight, Cleghorn, Brandis, Mr. Fergusson.*

CHICKRASSIA VELUTINA, *Wall.*

C. minmonii, *Grah.*

This tree is mentioned by Major Beddome as growing on the Animullays and in Malabar, and its wood as similar to that of C. tabularis. —*Beddome.*

CHINA RED WOOD. A Penang wood, of a red colour. Only used for furniture.

CHINJERITT. A Penang wood, of a brown colour. A small tree; used for furniture.

CHIN ZOOAY. BURM.? Meaning Elephant's-teeth. A wood of maximum girth 1½ to 2 cubits, maximum length 10 feet, abundant on the hills, inland, always on rocky barren hard ground, in mountainous or hill districts all over the Tenasserim provinces. When seasoned, sinks in the water. This wood is believed by Captain Dance to be the hardest and strongest known in these latitudes, perhaps anywhere in the world. It is, however, only procurable in such rocky spots as no other tree will grow in, so must be sent for on purpose. It cuts up, as yendaik and other hard woods do, with huge cracks through it; in fact this is the most wasteful of all known valuable timber in this respect and the original scantling is but small, so that it is not available for general purposes, but it is invaluable for the edges of Phillester planes, for spoke shaves, and for purposes in which much scantling is not required.—*Captain Dance.*

CHINNY. TAM.? A Travancore wood, of a rather dark colour, specific gravity 0·515. From 8 to 16 feet in circumference; used for building canoes.—*Col. Frith.*

CHIONANTHUS, *Species.*

Raban. PANJ. | Sira. PANJ.

A small tree of the Panjab Himalaya, growing at 4,000 to 6,000 of elevation Wood soft, white and light, and is used for implements and for native houses.—*Dr. J. L. Stewart, p.* 178.

CHIONANTHUS ZEYLANICA, *Willd.*

Geri-œta. SINGH.

A common, small tree near, the coast of Ceylon. Wood used for common house-work. —*Thurstan, quoted by Mr. Fergusson.*

CHITTA LINNY. TAM.? A Travancore wood, of a red colour, specific gravity 0·847, 1 to 1½ feet in circumference; used for furniture.—*Col. Frith.*

CHITTAGONG. From this province, on the north eastern coast of the Bay of Bengal, only the names of a few woods have been obtained. Captain Marquart sent five woods to the Exhibition of 1851, and the Calcutta Catalogue for the Exhibition of 1862, contains the names of 10 woods. Captain Marquart's woods are,

Acacia, *sp.*, koom koyre.
Conocarpus, *sp.*, buthna.
Diospyros melanoxylon.
Dipterocarpus, *sp.*, Sargotiah.
Swietenia chickrassa.

The list for the 1862 Exhibition is,

Chaplasha,
Chickrassi,
Chuckwa,
Gamar,
Gout gootia,
Jarool,
Kandeb,
Loehah,
Tazeboil,
Toon.

See BURMAH, AKYAB AND ASSAM.

CHIURACY? A Penang wood, of a brown colour, specific gravity 1·081. Used for beams; does not work kindly.

CHLORIDE OF ZINC. Captain Keppell believes Sir William Burnett's solution of chloride of zinc, properly applied, the only composition yet known that will preserve any article from the white ants.—*Keppell's Ind. Arch., Vol. II, p.* 189.

CHLOROXYLON SWIETENIA, *Roxb.; W. & A.; DC.*

Swietenia chloroxylon, *Roxb.*

Satin wood. ENG.
Bhiree. HIND.
Mal burute or flowered satin. SINGH.
Burute. ,,
Buruchgass. ,,
Mududa. TAM.
Vum maai. TAM.
Porasham. ,,
Kodawah porasham. TAM.
Billuda. TEL.
Billu chettu. TEL.
Bilugu? URIA.
Bhayroo. ,,

The Satin wood tree grows in Ceylon, in the northern and southern, but chiefly in the eastern districts, where it attains a large size and is esteemed next to Calamander wood in value. It is liable to warp and split, if not well seasoned in the shade. Flower satin wood is generally obtained from the roots of thi[illegible]e. It grows also in Coimbatore, in the Anamallai hills, where, latterly, Dr. Wight got planks 15 inches broad. Indeed, some of the finest satinwood to be anywhere seen is to be met with near the foot of the Anamallai Hills; though, even there, this valuable wood was rapidly disappearing, under the cultivator's axe. Dr. Gibson, writing from the Bombay Presidency, says he had never seen it reach beyond the size of a small tree, which, when straight (seldom the case), would afford a log squaring three inches. It is a rare tree, also, being, in so far as he had seen, found only in the Padshapoor jungles, and in those of the upper Mool, in the Ahmednuggur collectorate. In the coast forests, he had never seen it. Dr. Cleghorn, in the M. E. J. Reports, says the tree grows abundantly in the mountainous districts of the Madras Presidency, but seldom attains a large size, though occasionally planks of 10 to 15 inches in breadth may be procured. In Ganjam and Gumsur, its extreme height is 40 feet, circumference 3 feet and height from the ground to the intersection of the first branch, 20 feet. The tree is not so common in Gumsur as in Bodogodo, and it is said to be still more plentiful in Mohery and other talooks to the south. Major Pearson says it is common all over the Central Provinces, but only the trees south of the Seonee district, below the ghats, attain a useful size, and those are preserved for the Arsenal. The Billu Karra of the Circars, says Mr. Rohde, is a most serviceable hard wood, well suited for naves of wheels and, were it procurable in any quantity, for all frame-work requiring strength and durability. The Peradenia bridge, a single arch of 205 feet on the road to Kandy, was designed and principally executed in this wood. The wood is very close-grained, hard and durable, of a light orange colour, takes a fine polish, and is suited for all kinds of ornamental purposes, but is somewhat apt to spiit. For picture frames, it is nearly equal to American maple. The timber bears submersion well, in some instances it is beautifully feathered. The flowered or feathered satin wood when first polished is one of the most beautiful woods in the world. Mr. Rohde has seen specimens surpassingly beautiful, but the logs are not distinguishable from ordinary satin wood till sawn, and twenty or forty may be cut without one of any beauty being found—the feathered satin wood seems very liable to sever when dry and old: articles of satin wood get darker and lose much of their beauty by age, unless protected by a coat of fine varnish. A cubic foot weighs 55 to 57 lbs. It is used for axletrees, oil presses, posts, bed posts, rafters and the handles of axes and, in the Madras Gun Carriage Manufactory, for naves of wheels; also, for fuses. The leaves are applied to wounds. The wood is heavy and strong, and reckoned very excellent for pieces of agricultural implements. Latterly it has been much employed as fuses, in Madras. Dr. Gibson had not seen it used in cabinet-work in the Bombay territory.—*Drs. Gibson, Wight, Cleghorn, Messrs. Rohde, Mendis, Fergusson, Major Pearson.*

CHOCHENA. Uria? A tree of Ganjam and Gumsur. Extreme height 60 feet, circumference 5 feet, and height from the ground to the intersection of the first branch, 9 feet. Chiefly used for firewood, the tree being tolerably common. The bark is used medicinally in fever. The milk is given medicinally to children in a disease, there called "Doobellee."—*Captain Macdonald.*

CHOECARPUS PUNGENS ? ? ?

Hedde woke. Singh.

Under these names, is mentioned a tree of the western province of Ceylon. Its wood weighs lbs. 58 to the square foot and lasts 50 years. It is used for common house-building purposes.—*Mendis.*

CHOCHII. Hind.? A tree of Chota Nagpore, yielding a hard, red grey timber.—*Cal. Cat. Ex.* 1862.

CHOMONDRI, or Chalembry, the Tamil name of a Ceylon tree, the wood of which is of a very dark colour, and durable. It grows to between twelve and twenty inches in diameter, and twenty feet in height. It is used by the native carpenters for general purposes. It produces a fruit which is used as medicine—*Edye, Ceylon.*

CHOONOKOLEE. Uria? A tree of Ganjam and Gumsur. Extreme height 10 feet, circumference 1 foot and height from ground to the intersection of the first branch, 5 feet: said to be a common useless tree. The fruit is eaten.—*Captain Macdonald.*

CHORAYEGODEE. Uria? A tree of Ganjam and Gumsur. Extreme height 22 feet, circumference 1½ feet and height from the ground to the intersection of the first branch, 6 feet. Used for firewood.—*Captain Macdonald.*

CHOROCADAMBOO? Tam. A Travancore wood, of a yellow colour, specific gravity 0·529, used for packing cases.

CHOUREEONA. Uria? A tree of Ganjam and Gumsur, extreme height 30 feet, circumference 3 feet, height from the ground to the intersection of the first branch, 8 feet. Tolerably common and burnt for firewood. The bark is used medicinally for rheumatism. The flowers are worn.—*Captain Macdonald.*

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GSL

CHRYSOPHYLLUM ROXBURGHII, G. Don.

Chrysophyllum acuminatum, *Roxb. Fl. Ind.*, *I*, 599.

Hali mara. CAN.
Star apple. ENG.
Pita-kara. HIND.
Tursee phul. MAHR.
Tarsee. „
Lawulu. SINGH.

This tree, one of the Sapotaceæ, grows to a large size, 30 feet or more. It is common in Ceylon near the coast, and its timber is used in house building. In Canara and Sunda, it is very common in the jungles near the ghats above, particularly to the south, and reaches a great height. Dr. Gibson heard of it as existing in some of the ghat jungles of the Southern Konkan, but had never seen it except in the Upper Canara and Sunda forests, where it is rather common. There are some trees in the Residency garden, at Hyderabad. The wood seems straight and good, but the tree is chiefly noticeable from the Gutta Percha-like incrustation common on the fruit which is about the size of a large crab-apple, ripens in October, and is edible.—*Dr. Gibson and Riddell, Mr. Fergusson.*

CINCHONA. A South American genus, species of which have been introduced into India, and into the islands of Netherlands India. The sites selected for it, in the peninsula of India, have been near Ootacamund and Neddiwattam on the Neilgherry hills, at an elevation of 5,400 feet; C. Lucumœfolia and C. Pahudiana, to the number of 500,000 plants, had previously been planted by the Dutch in Java. The following are the species planted on the Neilgherries up to 1862.

Botanical Names.	Commercial Names.	No. of Plants.	Value in the London market per lb. of dry Bark.
			s. d. s. d.
1. Cinchona Succirubra..........	Red bark	14,450	2 6 8 9
2. „ Calisaya................	Yellow bark.........	237	2 10 to 7 0
3. „ Condaminea var. Uritusinga..............	Original Loxa bark	1	2 10 to 7 0
4. „ „ var. Chahuarguera	Rusty crown bark.	8,000	2 10 to 7 0
5. „ „ var. Crespilla....	Fine crown bark...	105	2 10 to 6 0
6. „ Lancifolia from Java...	Crown bark......	1	1 8 to 2 10
7. „ Nitida....................	Genuine grey bark	2,922	1 8 to 2 9
8. „ Species without name..	Fine grey bark.....	1,211	1 8 to 2 10
9. „ Micrantha	Grey bark..........	3,786	1 8 to 2 9
10. „ Peruviana	Finest grey bark ..	357	1 8 to 2 10
11. „ Pahudiana from Java...	Unknown............	425	Worthless.
	Total No. of plants	31,492	

CINNAMOMUM. Many species of this genus grow in India, Ceylon, the Archipelago and China. C. albiflorum, *Nees*, is a tree of Nepaul, Tipperah, Bakot, Hazara, and rare in Chamba: its wood is reddish coloured, and its pleasant flavoured bark smells strongly of camphor and cinnamon; it is the C. camphoratum, *Blain.* the Laurus cassia of Roxburgh. C. caudatum, *Nees*, is a tree of Nepaul. C. dubium, *Wight*, a tree of Ceylon. C. dulce, *Nees*, is a small tree of China, it is the C. Chinense of *Blain.* and Laurus dulcis of Roxburgh. C. multiflorum and C. ovalifolium and C. villosum, *Wight*, grows in Ceylon. Cinnamomum Loureirii grows on the lofty mountains of Cochin-China, to the west towards Laos, and in Japan; the flowers of Cassia are produced by this species. Cinnamomum rubrum, grow in Cochin-China, and yields an essential oil. Cinnamomum sintoc, grows on the Neilgherry mountains, in Hindustan, and on the higher mountains of Java. It is a tree 80 feet high. The bark is bitter and dry. Cinnamomum tamala, grows wild in Derwanee and Gongachora and is cultivated in the gardens of Rungpoor; the taste of the leaves when dried is aromatic; they are sold in the shops under the name of Folia Malabathri, Tamalapathri, or Indica of India. Cinnamomum xanthoneuron, is a tree growing on the Papuan Islands and the Moluccas; the bark has great fragrance when fresh, but loses this quality in time.—*Eng. Cyc., Voigt., Roxb., Hooker and Thompson.*

CINNAMOMUM AROMATICUM, *Nees v. Esen.*

Cinnamomum cassia, *Blume.*
Laurus cassia, *Nees*, *t.* 3.
Laurus cinnamomum, *Andrew's Report.*

A tree of considerable size, said to grow in the dry sandy districts lying N. W. of the town of Fai-foo, between *Lat.* 15 and 16 N. and is said to produce the cinnamon of China and Cochin-China, as also cassia bark and the aromatic fruits called Cassia buds.

CINNAMOMUM CITRIODORUM, *Thwaites*, 253.

Pængiri-Kurundu-gas. SINGH.

A Ceylon tree 20 to 30 feet in height which grows at Saffragam and Galagama at 1,000 to 2,000 feet. Its Singhalese name indicates that its bark has the smell of Citronella oil.—*Mr. Fergusson.*

CINNAMOMUM CULITLAWAN, *Nees.*

Laurus culitlawan, *Roxb.*
Laurus caryophyllus, *Lour.*
Cortex caryophylloides, *Rumph.*

A native of Cochin-China, Moluccas and Amboyna, especially in Leitimoo, near the villages of Saya Rutton and Ema. Its pungent astringent bark is used medicinally.

CINNAMOMUM EUCALYPTOIDES, *Nees.*

Laurus malabathrica, *Soland. Roxb. Hort. Cal.*

A tree of the Malabar mountains.

CINNAMOMUM INERS, *Nees, Rein.*

Wild Cinnamon. ENG.
Ran dal-chini. MAHR.
Sembela. TAM.
Pooli pilla. TAM.

This tree grows in Java, Penang, Moulmein, Ataran, Chappedong, in the Concans, is found in the Bombay ghat forests, chiefly to the south, also in the forests of the western coast of the peninsula of India, and in the Coimbatore district. Dr. Gibson says, the wood is rather strong, but is little used in house-building, or for implements. Dr. Wight says, it is a tall tree in Coimbatore, rather slender in proportion to its height and the wood is fine, even-grained and supposed very good, but apparently has never been used by the carpenters there, as none of them are acquainted with it.—*Drs. Gibson and Wight, Voigt.*

CINNAMOMUM JAVANICUM, is a tree with a trunk 20 feet to 30 feet high, growing in Java and Borneo. The bark is a deep cinnamon-brown colour, and deserves attention on account of its powerful anti-spasmodic properties.—*Eng. Cyc., page* 1089.

CINNAMOMUM LITSÆÆFOLIUM, *Thwaites.*

Kuddu-kurundu-gas. SINGH.

Grows at Happootella at an elevation of 5,000 feet, and rises 50 to 60 feet high. The timber of this and of C. citriodorum, Mr. Fergusson says, though not known as yet, are sure to be useful for various economical purposes.—*Fergusson.*

CINNAMOMUM NITIDUM, *Nees.*

Laurus nitida, *Roxb.* ii, 300.

A tree of Sumatra, with a cinnamon-like bark.—*Roxb., Voigt.*

CINNAMOMUM OBTUSIFOLIUM, *Nees.*

Laurus obtusifolia, *Roxb.* ii, 302.

Grows in the mountainous countries east of Bengal. Its timber is useful for various purposes.—*Roxb., Voigt.*

CINNAMOMUM ZEYLANICUM, *Nees.*

Laurus cinnamomum, *Linn* | Cinnamon tree. ENG.

Its products.

Darsini. ARAB.
Dal-chini gach'h. BENG.
Kaneel. DUT.
Cinnamon. ENG.
True cinnamon tree. ENG.
Cannelle. FR.
Zimmet, Kanehl. GER.
Κινναμον. GR.
Tuj. GUZ.
Kinnemon, HEB.
Dalcheenee. HIND. PERS.
Canella. IT. LAT. PORT.
Cinnamomum. LAT.
Kaimanis. MALAY.
Darasita. SANS.
Kurundu. SINGH.
Canela. SP.
Carruwa puttay. TAM.
Sanalinga putta. TEL.

This is a native of Ceylon and Java, grows in the peninsula of India, and is cultivated in various parts of the world; but has many varieties. Trunk 15 to 20 feet high by 1½ feet in diameter. Wood of a light-brown colour. This is the source of the true cinnamon, but nearly all parts of the tree are of value and importance. An aromatic oil is contained in its bark, the root of the cinnamon tree yields camphor; the liber, oil of cinnamon; the leaves, oil of cloves; and the fruit a peculiar terebintaceous ethereal oil. When the branches are peeled, the finest sticks of cinnamon are said to be obtained from the liber of the middle-sized branches, an inferior sort from the youngest shoots, and that which is produced by the thickest branches, is considered of very little value.—Cinnamon is the *Kinnemon* of Exod. xxx. 23, (see Bible.Cycl. ii., p. 210), and the κινναμωμον of Herodotus, a name which Dr. Royle states the Greeks learned from the Phœnicians.—*Royle, McCulloch's Dict., p.* 277, *Voigt., Fergusson, Nat. Hist. of Bible, Calmet.*

CIRCAR WOODS. The forests of the Northern Circars, on the Godavery and on the mountainous tracts which run parallel with the coast in the north-eastern parts of the peninsula, furnish a great variety of useful timbers and fancy woods, of which perhaps only a small portion have been determined and made known. The following lists from the Reports of the London Exhibition of 1851, of 31 woods, and from that of Madras in 1857, of 108 woods, enumerate many of value, the larger list, being from Lieutenant (now Major) Beddome. This tract of country was well examined, in the close of the last, and beginning of the present, century, by Dr. Roxburgh, whose valuable Coromandel plants were published in 1797 by the East India Company, and his Flora Indica in 1832 after his demise.

Woods sent to the Exhibition of 1851.

Odina wodier, Goompana wood. Goompana kurra.
Ganara wood. Ganara kurra.
Pentaptera tomentosa, Nulla muddi wood, Nulla muddi Kurra: Caroomaroodum.
Pentaptera glabra, Tella muddi wood, Tella muddi kurra; Vel maroodum maram.
Cassia auriculata, Tangada wood, Tangada kurra, Auvarai maram.
Paya wood. Paya kurra.
Annen wood. Annen kurra.
Morinda citrifolia, Togara wood. Togara kurra.
Red dye wood, Vizianagrum Zemindary.
Bombax Malabaricum or *heptaphyllum*, Booroonga wood, Buruga kurra.
Strychnos potatorum, Induga wood, Induga kurra. Thethan maram.
Cordia myxa Muckaroo wood, Mukkera kurra.
Tobica wood, Tobica kurra.
Tella oolemara wood. Telloo oolemara kurra.
Diospyros chloroxylon, Nulla Ulemara kurra.
Mimosa cinerea Vulture wood, Vulture kurra.
Feronia elephantum, Wood apple wood; Valaga kurra Koweet. Vella maram.
Ficus racemosa, Bodda wood, Bodda kurra.
Voodaga wood.
Pterospermum Heynei, Lolooga wood. Lolooga kurra.
Thespesia populnea, Gungarane wood, Gungarane kurra. Poovarasa maram.
Æschynomene grandiflora, Auguste wood.
Erythrina Indica, Bandita wood, Bandita kurra.
Sapindus emarginatus, Soap-nut, or Koonkoodoo wood, Koonkoodoo kurra.
Camooga wood. Kumooga-maram.
Doduga wood.
Cumba wood, Cumba kurra. Gmelina?
Goomoodoo wood, Goomoodoo kurra.
Unkoodoo wood, Unkoodoo kurra.
Undooroo wood, Undooroo kurra. Briedelia?
Iscarasee wood, Iscarasee kurra.
Gantha wood, Gantha kurra.

Timber trees of the Godavery and of the Circars, between Bhadrachellum and Condapilly, by Lieutenant (now Major) Beddome.

Acacia arabica.
Acacia elata.
Acacia ferruginea
Acacia kalkora.
Acacia leucophlœa.
Acacia odoratissima.
Acacia speciosa
Acacia suma.
Acacia sundra.
Ailanthus excelsa.
Alangium decapetalum.
Anogeissus acuminatus.
Anogeissus latifolius.
Azadirachta Indica.
Ægle marmelos.
Bassia latifolia.
Bauhinia, sp.
Bignonia chelonoides.
Bignonia suaveolens.
Bignonia xylocarpa.
Briedelia spinosa.
Canthium didymum.
Canthium parviflorum.
Capparis grandis.
Caryota urens.
Casearia, sp.
Chloroxylon Swietenia
Cluytia collina.
Cordia angustifolia.
Cordia myxa.
Cordia, new species.
Cordia polygama.
Crataeva Roxburghii.
Dalbergia frondosa.
Dalbergia latifolia.
Dalbergia Oojeinensis.
Dalbergia paniculata.
Dillenia pentagyna.
Dillenia speciosa.
Diospyros chloroxylon.
Diospyros melanoxylon.
Diospyros, sp.
Diospyros.sp., D. Sylvatica??
Emblica officinalis.
Ehretia lævis.
Eriolæna Hookeriana.
Euphorbia tirucalli.
Flacourtia sapida.
Ficus Indica.
Gardenia gummifera
Gardenia latifolia
Gardenia lucida.
Gardenia, sp.
Givotia Rottleriformis.
Gmelina arborea.
Grewia Rothii.
Grewia tiliæfolia.
Guatteria cerasoides.
Gyrocarpus Jacquini.
Hardwickia binata.
Hymenodyction, sp.
Inga xylocarpa.
Ixora parviflora.
Lagerstrœmia parviflora.
Limonia acidissima.
Maba buxifolia.
Mangifera Indica.
Mimusops hexandra.
Morinda exserta.
Nauclea cordifolia.
Nauclea parviflora.
Nycthanthes arbor tristis.
Pavetta tomentosa.
Pongamia glabra.
Premna tomentosa.
Prosopis spicigera.
Pterospermum Heynei.
Pterocarpus marsupium.
Pterocarpus santalinus.
Randia, sp.
Sapindus emarginatus.
Schleichera trijuga.
Schrebera Swietenioides.
Sclerostylis atalantioides.
Shorea robusta.
Soymida febrifuga.
Spathodea Roxburghii.
Spathodea Rheedii, (Bignonia spathacea, Roxburgh.)
Sponia, sp.
Sterculia colorata.
Sterculia urens.
Strychnos nux vomica.
Strychnos potatorum.
Stylocoryna Webera.
Syzygium jambolanum.
Tamarindus Indica.
Tectona grandis.
Terminalia catappa.
Terminalia chebula.
Terminalia glabra.
Terminalia tomentosa.
Uvaria tomentosa.
Vitex arborea.
Wrightia tomentosa.
Wrightia tinctoria.
Ximenia Americana.
Zizyphus jujuba.

See GANJAM, GODAVERY, GUMSUR, PURLA KIMEDY.

CITRUS AURANTIUM, *Linn.*

C. nobilis, *Lour.*

Naranj. ARAB.
Narang. ,,
Kamla nebu. BENG.
Lieng-mau. BURM.
Orangen. DUT.
Orange tree. ENG.
Common orange. ,,
Sweet orange. ,,
Orange wood tree. ,,
Oranges. FR.
Pomeranzen. GER.
Naringi. HIND.
Arancia. IT.
Melarancia. ,,
Jerooc. MALAY.
Simao-manis. MALAY.
Naranj. PERS.
Pomeranezu. RUS.
Nagranga. SANS.
Naranjas. SP.
Naranjo. ,,
Kolinji maram. TAM.
Kitchili ,, ,,
Kichidi. TEL.

The well known orange tree has a hard wood, but is not available of any size, and seldom of any quantity, as the tree is much valued for its fruit. The orange is not mentioned, either by the ancients or by the Arab authors, and is supposed to have been introduced into Europe after the middle ages. Dr. Royle states, that the orange and lemon are natives of India, the orange being found on the Neilgherries, on the borders of the Sal forests of Sylhet and, perhaps, also in China. Mr. W. Elliot states that a very small variety of the orange ("Ida chettu, TEL." "Chota kichili, HIND.;" "Kiri kittali, CAN.;" which is the C. variatro of Heyne, 57 Musk orange) grows both cultivated and wild in all the hilly country of the Circars; and, he asks, if that be the original of the cultivated Citrus aurantium. Mr. R. Thompson says Citrus limonum and C. bergamia, occur in the forests of Kumaon, but seem to have been originally planted. Citrus wood of the ancients is not a product of India, but from the Callitris quadrivalvis, the jointed arbor vitæ.—*Voigt, Mr. Elliot, Royle, Mr. Thompson.*

CITRUS BERGAMIA, *Risso* and *Poit.* The lime; C. decumana, *R. Linn.*, the shaddock or pumplemose; C. limonum, *Risso and Poit.*, the lemon; and C. medica, *Linn.*, the citròn, are small trees, all natives of India, producing hard close-grained woods.

CITRUS MEDICA ???

Ambele Toba. URIA.

Under these names, Captain Macdonald describes a tree of Ganjam and Gumsur. Extreme height 30 feet. Circumference 1 foot. Height from the ground to the intersection of the first branch, 6 feet. Wood useless except for firewood. The bark is used medicinally for colic and diseases of the stomach. The fruit is pickled. The tree is not common.

CLAUSENA INDICA, *Oliver.*

Piplostylis Indica, *Dalz.* | Bergera nitida, *Thwaites.*

Common on the Anamallai hills, has a close-grained hard wood.—*Major Beddome.*

CLEIDION JAVANICUM, *Blume.*

A tree of Malabar and the Anamallai forests, with a very hard wood.—*Major Beddome.*

CLEYERA GYMNATHERA, *W. & A.*

A tree of the Neilgherry and Pulney Hills with a strong wood.—*Major Beddome.*

COCHLOSPERMUM GOSSYPIUM, *DC., W. & A.*

Bombax gossypium. *Linn., Roxb.*

Chima-punji. MALEAL.
Tanaku. TAM. ???
Konda gogu. TEL.

This tree grows in Travancore, on the Coromandel coast, at Hurdwar, and on the low sand hills west of Hurdwar: it yields the gum katira, which in the N. W. Provinces of India is substituted for tragacanth; wood soft, and only used as firewood.—*Voigt, Thompson.*

COCOS NUCIFERA, *Linn.*

Palma indica major, *Rumph.* | Calappas, *Rumph.*

Narikel. BENG.
Kinghena. CAN.
Cocoanut tree. ENG.
Cocoanut palm tree.
Narel-ka jhar. HIND.
Kalapa. JAV.
Nur. ,,
Kalambir. MALAY.
Tenga. MALEAL.
Nari-kera. SANS.
Nali ,, ,,
Pol gaha. SINGH.
Tenna maram. TAM.
Tenkaia chettu. TEL.
Erra bondala kobbari chettu. TEL.
Kobbari chettu. ,,
Gujju narikedam. ,,

The nut.

Jouz-i-hindi. ARAB. PERS.
Naril. ,,
Narel. DUK. HIND.
Kokosnuten. DUT.
Cocoanut. ENG.
Cocos. FR. SP.
Kokonusse. GER.
Narul. GUZ.
Naril. ,,
Cocchi. IT.
Nur. MALAY.
Calapa. ,,
Kalambir. ,,
Tangha? MALEAL.
Nargil. ,,
Kokos. RUS.
Narikela. SANS.
Tengai. TAM.
Tenkaia. TEL.

The palm wine.

Nargilli. AR.
Narilli. DUK.
Cocoanut toddy. ENG.
Tennam kallu. TAM.
Tenkaia ,, TEL.

Its cabbage.

Naril ka krute. DUK.
Cocoanut cabbage. ENG.
Tennam kurtu. TAM.
Tenkaia gurtu. TEL.

Its sugar or jaggery.

Naril ka gur. DUR.
Jaggery of cocoanut toddy. ENG.
Tennam vellam. TAM.
Tenkaia bellam. TEL.

Its oil.

Cobri. CAN.
Naril ka tel. DUK.
Cocoanut oil. ENG.
Nur miniak. MALAY.
Kalapa miniak. MALAY.
Narikaylum. SANS.
Tengai yennai. TAM.
Tenkaia nuna. TEL.

Its water or albumen.

Narel ka pani. DUK.
Cocoanut water. ENG.
Yella-nir. TAM.
Yella-niru. TEL.

Its fibre.

Coir. ENG. HIND.
Tennam nar. TAM.
Tenkaia nara. TEL.

The cocoanut palm does not seem to have been known to the ancients, though it is said to be indigenous in the East, from which they received ambassadors. It grows in great abundance in the Maldive and Laccadive islands: on the Malabar Coast, in Ceylon: on the Eastern side of the Bay of Bengal, whence it ascends both the Brahmaputra and Ganges rivers to a considerable distance. It grows in most of the islands of the Eastern Archipelago, from the Sunda Islands to Molucca, and in those of the Pacific Ocean, and is cultivated in various tropical parts of the New World. It is self-propagating. Its keel-shaped nut, protected from the salt water by its tough and thick, though light, covering, sails on the ocean to barren spots where it germinates and causes even the smallest islets to become covered with clumps of this graceful palm. The cylindrical stems, with a diameter of about two feet, attain an elevation of from sixty to one hundred feet. They are surmounted by numerous wavy leaves, called fronds, by botanists, and their foot stalks are often called branches, by travellers. The leaves are gigantic in size—being about 20 feet in length, with a strong tough stalk, which forms the midrib, and has a number of narrow and long leaflets ranged along the two sides. This tree thrives best on the sea coast, and its wood is used for reepers, for which purpose it is, however, inferior to the palmyra, though, in Ceylon, and on the Western Coast hard and durable rafters are procurable. It furnishes a strong and durable wood, a cubic foot weighs 70 lbs., and its timber is esteemed to last for 20 to 50 years. It is used for ridge poles, for temporary roofs, aqueducts, &c., for small boats, for the beams, posts and rafters of houses, for spear handles, paling, and walking sticks: for fancy boxes and furniture; for boat's frames, bridges, ramparts, water butts, conduits, gutters and drums, it forms one of the porcupine woods of commerce and is used for fancy articles: and a farinaceous substance is contained in the stem which forms a good substitute for sago. Each tree produces annually from 50 to 60 cocoanuts. These are enclosed in a thick fibrous husk from which the coir of commerce is obtained by maceration and beating. The husk is employed as a scrubbing brush and polishing brush, it is converted into cordage of various kinds, employed for the rigging of ships, fishing nets, matting, and brushes; and, where obtainable in India, it is, in its loose state, the usual material with which mattresses, pillows and sofas are stuffed. Within the fibrous husk, is the shell, which is very brittle, though its structure is somewhat fibrous. Cut in various ways, it is formed into cups and drinking vessels, into pitchers, funnels, and lamps. It is susceptible of a high polish, and admits of being turned in an ornamental manner. Those shells which are tolerably circular are used for the bodies of cups and vases, the feet and covers being made of wood and ivory. Common buttons are also made of the cocoanut shell, and are considered better than those of horn as they do not, like that material, absorb the moisture which causes horn buttons to swell and burst. The shell forms a valuable charcoal. In its young and green state, the cocoanut contains a clear albuminous fluid, with a sweetish taste and a slight degree of astringency which makes it a very agreeable refreshing beverage, and it is also used by house-plasterers as an ingredient in their white washes made of pure lime. But, as the nut advances to its full maturity, the fluid disappears and the hollow is filled by the almond-like dried albumen which is the germinating organ. This pulp or kernel, when young, can be easily removed by a spoon: when cut in pieces and dried in the sun, this is called copra, which forms an extensive article of commerce throughout the South and East of Asia. It is used grated in cur[illegible] throughout the East, or its milk is expressed from it; and, from copra, a valuable oil is expressed, which is employed in anointing the body, is used in lamps, is largely converted into the stearine candles of England, and forms an invaluable substitute for cod liver oil. The refuse oil cake "Poonac" forms an excellent manure. The white and solid albumen is often cut into ornaments of flowers and fruits, meant to represent the garlands given to visitors of distinction. They are worn by Tanjore ladies at particular festivals. The very young or heart-leaves of this palm, are called the cabbage, and form an excellent vegetable either cooked or dressed in stews, hashes or ragouts. In the Laccadive islands, the heart-leaves of the tree, just before they unfold, are cut out and plaited into mats of fine quality which are there used as sails for the smaller boats, and are much esteemed when exported. In India, the leaves dried, and called cadjans, are plaited and used as thatch, and for the outer and inner linings of walls of houses: the leaves are also made into mats, baskets, both fancy and plain, into fans, combs, brooms, screens, buckets and lanterns, into articles of dress, and into leaf-books, torches and fuel. The midribs of the leaves or fronds are fibrous but brittle, and are used as brooms. The roots of the tree are chewed as a substitute for betel nut. The beverage known to Europeans as palm wine or toddy, or rather as one of the palm wines, for many palms yield a similar product, is obtained from the flower spathes. Before the flowers have expanded, the spathes—and these are themselves astringent and used medicinally—are tied with the young leaves and then cut transversely from the top downwards, and beaten daily with the handle of the knife or a piece of hard wood, and the toddy, after a few days, exudes into a calabash or earthen pot. In the early morning, this is a pleasant, refrigerating drink, but it ferments towards night and becomes an intoxicating fluid, which is largely drank and is used as a ferment. It is to a great extent artificially brought to the vinous and acetous fermentations, and, in the former state, an alcoholic spirit is distilled from it, which forms one of the aracks of commerce; one hundred gallons of toddy produce, it is said, by distillation, twenty-five gallons of arrack; eight gallons of sweet toddy boiled over a slow fire, yield two gallons of a luscious syrup, from which, by further boiling, a coarse brown sugar is produced, known in commerce as jaggery.—*Simmond's Commercial Products, Royle's Fibrous Plants, Madras Exh. Jury Reports, Seeman on Palms, Ainslie's Materia Medica, Madras Lit. Soc. Journ., English Cyclopædia, Elliot's Flora Andhrica.*

COIMBATORE WOODS. The district of Coimbatore, in the south of the Indian peninsula, has a general elevation of about 800 feet above the sea, but several alpine forest tracts occur in it. Dr. Wight, while residing there in 1850, sent to the Exhibition of 1851 a collection of 133 of its woods, with valuable notes as to their abundance and characters. These notes, with additions by Mr. Rohde, formed the first concentrated botanical information regarding the timber trees and woods of the Madras Presidency. Dr. Wight's 133 specimens were as under—

Acacia arabica.
Acacia amara.
Acacia catechu.
Acacia sundra.
Acacia odoratissima.
Acacia odoratissima?
Acacia speciosa, or flectuosa.
Ailanthus excelsa.
Alangium decapetalum.
Artocarpus hirsuta.
Antidesma alexiteria.
Atalantia monophylla.
Artocarpus integrifolia.
Azadirachta Indica.
Ægle marmelos.
Balanites Ægyptiaca.
Bassia longifolia.
Bauhinia acuminata.
Bauhinia racemosa.
Bauhinia tomentosa.
Bignonia xylocarpa.
Borassus flabelliformis.
Bombax malabaricum.
Briedelia spinosa?
Butea frondosa.
Calosanthes Indica.
Calophyllum inophyllum.
Canthium nitens?
Careya arborea.
Cinnamomum iners.
Canthium parviflorum.
Casearia elliptica.
Cassia fistula.
Capparis divaricata.
Capparis grandis.
Cedrela toona.
Chickrassia tabularis.
Chloroxylon swietenia.
Cratæva Roxburghii.
Cordia Rothii.
Cedrela toona.
Cœsalpinia sappan.
Conocarpus latifolia.
Cluytia collina.
Cullenea excelsa.
Dalbergia sissoides.
Dalbergia latifolia.
Dalbergia paniculata.
Dichrostachys cinerea.
Diospyros cordifolia.
Diospyros ebenaster.
Diospyros melanoxylon.
Dillenia pentagyna.
Ehretia ovalifolia.
Elæodendron Roxburghii.
Eugenia caryophyllifolia.
Eriodendron anfractuosum.
Erythrina Indica.
Euphorbia tirucalli.
Eugenia jambolanum.
Feronia elephantum.
Ficus t'siela.
Garcinia glutinifera.
Gardenia turgida?
Garuga pinnata.
Givotia Rottleriformis.
Grewia tiliæfolia.
Gmelina arborea.
Gmelina asiatica.
Guatteria cerasoides.
Holarrhena codaga.
Hydnocarpus inebrians.
Hymenodyction utile.
Hymenodyction obovatum.
Inga xylocarpa.
Lagerstrœmia reginæ.
Lagerstrœmia microcarpa?
Lagerstrœmia microcarpa.
Limonia alata.
Mangifera Indica.
Melia azadirachta.
Michelia Nilagirica.
Mimusops elengi.
Morinda citrifolia.
Morinda citrifolia?
Myristica cinerea?
Nauclea cordifolia.
Nauclea parviflora.
Nephelium longanum.
Nerium antidysentericum.
Odina wodier.
Premna tomentosa.
Premna integrifolia.
Pongamia glabra.
Prosopis spicigera.
Pterocarpus santalinus.
Prosopis spicigera?
Pterocarpus marsupium.
Putranjiva Roxburghii.
Randea dumetorum.
Rhus?—Sp.?
Santalum album.
Sapindus emarginatus.
Schleichera trijuga.
Semecarpus anacardium.
Sethia Indica.
Soymida febrifuga.
Stereospermum suaveolens.
Spathodea arcuata.
Soymida febrifuga.
Strychnos potatorum.
Strychnos nux vomica.
Stereospermum chelonoides.
Sterculia urens.
Tamarindus Indica.
Tectona?
Tectona grandis.
Terminalia bellerica.
Terminalia Berryi.
Terminalia glabra.
Terminalia alata.
Terminalia catappa.
Terminalia chebula.
Terminalia bellerica?
Thespesia populnea.
Ulmus integrifolia.
Vachellia farnesiana.
Vitex altissima.
Wrightia tinctoria.
Zizyphus œnoplia.
Zizyphus glabrata.
Zizyphus jujuba.

COFFEA ARABICA, *Linn.*

The coffee plant has run wild in the forests of Ceylon, and Mr. Fergusson has seen trees of the real Coffee plant in the forests of Deltotte, upwards of 20 feet in height, and 3 to 4 inches in diameter, with a hard white,

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close-grained wood. These were escapes from the coffee estates. Mr. Fergusson says that there are two if not three species there.—*Mr. Fergusson.*

COLEBROOKIA OPPOSITIFOLIA.

Basoti, HIND of Kangra.

A large shrub of the Siwalik tract, up to 4,000 feet, occurring also in the Salt Range, Trans-Indus, and abundant at lower heights of the Himalaya, &c. Wood used for gunpowder charcoal, and its leaves are applied to wounds and bruises. Dr. Stewart gives as vernacular names, duss, sampni ; suali ; briali ; basuti ; barmera ; shakar-dana, phis, and bekkar.—*Powell, Dr. J. L. Stewart.*

COLUBRINA ASIATICA, R. *Br.*

Ceanothus Asiaticus, *Linn.*	Ceanothus capsularis, *Roxb.*

Asiatic Red wood. ENG.

A large shrub with pale-greenish flowers. Wood, not known. Voigt notices other two shrubs of this genus, C. Nepaulensis of Nepaul and C. macrophylla of Martaban.—*Mr. R. Brown, Voigt.*

COMMIPHORA MADAGASCARENSIS, *Lindl. ; Fl. Med.* 173.

Amyris commiphora, *Roxb.*
„ aggalocha, *Roxb. W., & A.*
Balsamodendron Roxburghii, *Arn. W. : Ill.*
Balsamodendron agallocha, *W. & A.*

Daracht-i Muql. PERS.

Its resin.

Aflatoon. ARAB.	Googul. HIND.
East Indian Myrrh. ENG.	Muql. PERS.
Bdellium. ENG.	Googula. SINGH.
βδελλιον. GREEK.	Kookool. TAM.
Μαδελχον of Dioscorides.	Googooloo TEL.

A small tree, a native of Sylhet, Assam, the Garrow hills and Madagascar : wood not known. It produces a valuable gum resin, of which the above are given as synonyms.—*Elliott's Flora Andh., O'Shaughnessy,* p. 287, *Voigt.*

CONGO. A wood used in Madras for fuzes.

CON-MOO. BURM.? A tree of Tavoy, furnishing a good timber, used for building houses and boats.

CONIFERÆ, a natural order of gymnospermous exogens (called by Dr. Lindley *Pinaceæ*), consisting of resinous, mostly evergreen, hard-leaved trees or shrubs, inhabiting all those parts of the world in which aborescent plants can exist. In Sikkim and Bhootan, there are twelve Coniferæ, viz., 3 Juniper, Yew ; Cupressus funebris, Abies Webbiana, Brunnoniana, and Smithiana ; Larch ; Pinus excelsa and longifolia, and Podocarpus nerifolia. Four of these, viz., Larch, Cupressus funebris, Podocarpus nerifolia and Abies Brunonniana, are not common to the North-west Himmalaya, west of Nepaul, and the other eight are common. Of the 13 natives of the North-west Provinces again, only the following five, Juniperus communis ; the Cedrus deodara, Pinus Gerardina, Pinus excelsa and Cupressus torulosa are not found in Sikkim. The Deodar ; Abies Smithiana ; Cupressus sempervirens ; Juniperus communis ; J. squamata, J. excelsa ; Picea Webbiana ; Pinus excelsa, P. Gerardiana ; P. longifolia, and Taxus baccata, are all plants of the N. W. Himalaya. Dr. Mason mentions the Pinus Latteri, as growing in Tenasserim, and Dr. Brandis adds Pinus Massonia, *Lamb.*, and Pinus Khassiana. Thunberg mentions many pines in Japan, and they are numerous in China. The Coniferæ of New Zealand are of stately, erect and elegant growth, and valuable as timber trees. Their native names are the Kowrie, Maikaikeatea, Kawaka, Totara, and Miro. Remu (*Dacrydium cupressinum*) ; Tanakáá or Tawai or Toatoa, (*Phyllocladus trichomanoides*).—*Bennett's Gatherings, Eng. Cyc., p.* 123, *Hooker, Vol. I. p.* 256, *Cal. Cat. Ex. of* 1862, *Drs. Brandis, Mason and J. L. Stewart.*

CONJEE MARAM. TAM.? A light-red coloured wood of Travancore, specific gravity 0·650, used for furniture, &c.

CONNARUS PANICULATUS, *Roxb.*

A large timber tree of Chittagong.—*Voigt.*

CONNARUS NITIDUS, *Roxb.*

This is described by Voigt as a tree of Sylhet. Dr. McClelland says that, in British Burmah, it is a shrub about ten feet high, very plentiful, especially in the Rangoon districts, and affords an oil seed of small size, but rich in a sweet oil.—*McClelland.*

CONNARUS SPECIOSA.

Gwai-douk. BURM.	Kadon k.,dot. BURM.

A large tree, very plentiful throughout the Rangoon, Pegu and Tounghoo districts, growing, scattered with teak in the Tounghoo district and in the forests of Pegu. It is a large, heavy and strong timber. Wood, white-coloured, adapted to every purpose of house-building, remarkable for the quantity of its seeds, which are of large size, abounding in sweet oil.—*Dr. McClelland.*

CONOCARPUS ACUMINATUS, *Roxb., Royle.*

Andersonia acuminata, *Roxb.*
„ lanceolata, *Rottler.*
Anogeissus acuminatus, *Wall.*

Yoong. BURM.	Pachi. TEL.
Pachiman? TEL.	Panchi „
Pachcha manu? TEL.	

This large timber tree grows in the Northern Circars, in the forests of the peninsula of India, and is found, along with the Conocarpus

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latifolius. It is a large very valuable and plentiful timber tree throughout the Southern forests. In British Burmah, it is almost equal to the Terminalia microcarpa in size and the regular growth of its stem. Its wood is reddish brown, hard and strong, its breaking weight being 262 ℔s. A cubic foot weighs ℔s. 50 to ℔s. 57 and, in a full-grown tree on good soil the average length of the trunk to the first branch is 80 feet, and average girth measured at 6 feet from the ground is 12 feet. It sells there at 12 annas per cubic foot. It flowers during the cold season. This tree is valuable on account of its wood, which is exceedingly like, and if kept dry, fully as strong, and as durable as the C. latifolia, but exposed to the water, it soon decays. Of course it is thus unfit for the marine yard, but equally fit for house-building when it can be obtained straight, which is seldom the case. But for its weight, it would be most excellent timber.—*Drs. McClelland and Brandis, Mr. Rohde's MSS., Voigt.*

CONOCARPUS LATIFOLIA, *Roxb.; W. & Ic. A.; W.*

Andersonia altissima, *Roxb.*
Anogeissus latifolius, *Wall.*

Daoura of Central Provinces. HIND.
Dhowa. ,,
Dhao of Kangra.
Kuldahan. ,,
Dawura. MAHR.
Thoura. ,,
Dhan. PANJAB.
Chal. ,,
Dawu-gas. SINGH.
Vekkali. TAM. of Ceylon.
Velle naga maram. TAM.
Siri manu. TEL.
Tella neredu chettu. TEL.
Chiri manu. TEL.
Duca. TEL. ?
Dhoboo. URIA ?
Nongoliah. ,,
Pooroo. ,,

This large timber tree grows in the Dehra Dhoon,—in the Kenneri jungles, valleys of the Konkan rivers, on the inland Dekhan hills, at Chillaime and at Chittagong. This is one of the largest timber trees that are found amongst that chain of mountains, on the peninsula of India, which bound the Circars on the west, where it is a native. It grows in open grassy places, in Ceylon north of Kandy, up to 1,500 feet: also in the valleys of the Concan rivers near their sources, and in the inland Dekhan hills. Axles of carts are generally made of this wood. It is common in Kumaon and Garhwal, on the limestone and shell formations and hilly sandy soils. The timber of the young tree is elastic and tough, and is much valued for helves and handles. The duramen, mature wood, is of a dark chocolate colour, veined, heavy and very brittle, cracking in radii. Logs 20 to 30 feet in length and 3 to 4 feet in girth, are commonly obtainable, and it is used for building purposes, and as supports. Common in the Siwalik hills, where it is used for beams and implements. It is called "chal" towards the Jumna. Yields a good, hard, strong timber; makes fine buggy shafts, and according to Jameson, scabbards for swords. It is common in the Kangra valley, but of small size; also in all the Lower Hills to some distance west of the Jumna.

It flowers during the cold season, in January and February. Its trunk is erect, straight, varying in length and thickness, the largest being thirty-five feet to the branches, and about six feet in circumference. Dr. Wight, writing from Coimbatore, says it is a tall handsome tree, furnishing an excellent and very strong timber. The specimens tried there, though not the best, sustained 500 lbs. Dr. Roxburgh speaks of it in very high terms. But Mr. Rohde could not learn that its timber was to be found of any size or value in Rajahmundry or the Masulipatam Circar, these being the only localities in which he had met with it in common use. And he thinks its wood is over estimated. He had seen many instances in which it has, though sound when put out, given way in buildings, and he had never seen it above a foot in diameter. On another occasion, Mr. Rohde says, "if this be the wood known by the name of *Serimon*, given by Roxburgh, I must say I never met with any worthy of the character he gives it—it is the common timber of Masulipatam, where I never saw a log of a size exceeding 12 inches in diameter. The Tamil name given by Dr. Wight is that of the white Eugenia." Other notes in my possession describe this as a large tree, but in some cases, the stem is so deeply furrowed as to prevent it yielding a good plank. There is a fine specimen of this tree in the neighbourhood of Sydapet, near Madras. It is found about the sources of the Concan rivers, Kennery jungles; and on the inland Dekhan hills, where it has a stunted and gnarled form. Dr. Gibson, however, says that, in the Bombay forests, it varies in size from a scrubby shrub to a great tree, according to soil and situation, and it seems to be as common in the inland forests as it is in those of the coast. The wood is well described by Dr. Wight as very strong. It is also tough, and hence is much in use for the wooden axles of carts. It is much used in agriculture and house-building. This is one of the trees which should be largely increased. Its timber is everywhere esteemed for almost every economical purpose, for house-building, shafts and yokes, and general railway purposes, and it makes very good cabinet furniture, and is exceedingly durable. Towards the centre, it is of a chocolate colour. For house and ship-building the natives reckon it superior to every other sort—Pentaptera tomentosa, and teak excepted. Captain Sankey writing from Nagpore says, it is a white wood, there, with a heart of a dark colour, and somewhat like rosewood. Its average length, there, is 12 feet, and girth 7 feet. It is so much prized by the natives of Nagpore for axle-trees, that but few trees are permitted to attain their proper growth. By all accounts, in Nagpore, about 20,000 axle-trees are made from this wood yearly. It is attacked by white ants. Though not obtainable in very large quantities it ranks high as a rafter timber.—*Drs. Roxburgh, Gibson, J. L. Stewart and Wight, Mr. Rohde, Captain Sankey, Voigt, Captain Beddome, Mr. R. Thompson, Major Pearson, Messrs. Fergusson and Powell.*

CONOCARPUS MYRTIFOLIUM ?

Kardahee. HIND. ?

This in the peninsula of Indus, is only a small shrub, but under these names there was sent to the Exhibition of 1862, as a tree of Jubbulpore, growing along the banks of the Nerbudda, a tough wood, but difficult to work; tolerably abundant, similar to Dowrah.—*Cal. Cat. Ex.* 1862.

CONOCARPUS ROBUSTUS.

Bai-byah. BURM.

A very large and strong timber tree, growing plentifully in the Pegu, Tounghoo and Prome forests, along with teak. Adapted for fancy work and cabinet-making.—*Dr. McClelland.*

COOKIA PUNCTATA, *Retz.*

Quinaria lansium, *Lour.*

Whong-pi. CHIN.	Wham-pi. CHIN.

The yellow and very agreeable fruit of this small Chinese tree has a white pulp, rather acrid but sweet, and which is much esteemed as an article of diet in China and the Archipelago.—*Voigt.*

COORAN ? A light-brown coloured Penang wood, used for planks for building.

CORDIA, a genus of plants belonging to the natural order *Cordiaceæ.* In the southern part of the Peninsula of India, the Tamil name, Narvilli maram, seems to be applied indiscriminately to three or four species, viz., Cordia Rothii, C. obliqua and C. fulvosa. Dr. Wight believes that the wood of all is very inferior, the trees being usually small. He gives, in his Icones, Cordia cuneata, 1379; domestica, 1378; fulvosa, 1380; Leschenaultii, 1380; myxa, 1378; obliqua, 1378; Perrottettii, 1381; Rothii, 1379; serrata, 469; tomentosa, 1378; trichostemon, 1380; and Wallichii, 1378: Voigt names also C. angustifolia, grandis, latifolia, monoica, polygama, prionodes and orientalis, trees and small trees.—*Dr. Wight.*

CORDIA ANGUSTIFOLIA, *Roxb.*

Cordia reticulata, *Roth.* not *Vahl.*

Narrow-leaved Sepistan. ENG.	Gundni. HIND.
Gund. HIND.	Naruvalli. TAM.
Gondi. ,,	Chinna botuku. TEL.
	Nukkeru. ,,

This tree is from 30 to 40 feet high, the wood is very tough, and is used for carriage poles, posts and in house-building, and, by Lt. Forsyth, is recommended for gun-stocks. It is common throughout the Deccan and about villages in the Circars, but never seen in the jungles. It is not uncommon as a planted tree in the plains of the Panjab. Fruit the size of a large pea, round and smooth, the pulp yellow and gelatinous, but tasteless.—*Roxb.* i, 595; *Royle, Fib. Pl., page* 11, *Dr. Riddell, Captain Beddome, Major Pearson, Mr. Powell.*

CORDIA LATIFOLIA, *Roxb.*

Buhuari. BENG.	Bhokur. HIND.
Broad-leaved Sepistan. ENG.	Barra lesura. HIND.
	Kicha virigi chettu. TEL.

This, according to Mr. R. Thompson, grows in Gurhwal and Kumaon as a handsome smooth-barked tree. Its timber is dense, heavy, very durable, and of a whitish colour; the tree attains a height of 20 feet with a girth of 2 feet, but takes a long time to attain that size. It is common at Ajmeer, and is found in Hindostan, but is mostly confined to the southern parts of India. It has numerous spreading branches, and the young shoots are angular and smooth. The general height of trees, ten or twelve years old, about 20 feet. The fruit is eaten: the "phaleeta" or slow matches are made of the bark. This tree is hardy and ornamental, and would do well in compounds along with other trees. Under the name of sebesten plums, sebestans, or sepistans, two sorts of Indian fruit have been employed as pectoral medicines, for which their mucilaginous qualities, combined with some astringency, have recommended them. They are believed to have been the *Persea* of Dioscorides. This tree furnishes one of them. Linnæus applied the name of Sebesten to an American species of this genus which is not known in medicine.—*Roxb.* i, 589; *Eng. Cyc., p.* 146, *Drs. Irvine, O'Shaughnessy, Wight and Royle, Mr. Elliot in Fl. Andh., Mr. R. Thompson.*

CORDIA MACLEODII, *Hooker,* (*qu.* monoica ?)

Hemigymma MacLeodii.

Deyngan. HIND.	Dhengun. HIND. ?
Dhyan. ,,	

Under these names, as a tree of Jubbulpore, there was sent to the Exhibition of 1862, specimens of a remarkably beautiful wood, found in Mundlah and Seonee. The tree was named after Mr. (Sir Donald) MacLeod. Its

GSL

wood approaches teak in its properties.—*Cal. Cat. Ex.* 1862, *Major Pearson.*

CORDIA MYXA, *Linn.; Roxb., Fl. Ind., I.* 500.

Lebuck of Avicenna.
Mochayet of Forskal.
Prunus sebestana, *Pluk.*
Cornus sanguinea, *Forsk.*
Cordia officinalis, *Lam.*
Cordia domestica, *Roth.*
Sebestan adomestica, *Lam. Commel. Pr. Alp.*
Sebestana myxa, *Commel.*
,, officinalis, *Gærtn.*

Labuk? Ar.
Buhuari. Beng.
Tha-nat. Burm.
Sepistan plum tree. Eng.
Nakkeru wood tree. Anglo-Tel.
Lusora. Hind.
Lesura. ,,
Kendal. Jav.
Vidi mara. Maleal.
Bukampadaruka. Sans.
Lolu. Singh.
Vidi maram. Tam.
Nakkera. Tel.
Nakeru. ,,
Iriki. ,,
Banka nakkera. Tel.
Ura nakeru. ,,
Pedda botuku ,,
Mookooroo karra ,,

A native of Egypt, Persia, Arabia, Ceylon, Hindostan, Nepaul, up to 3,500 to 4,000 feet, on the Siwalik Hills up to the Ravi, the forests of the Godavery, and common throughout the Konkan, Pegu and the Malay Peninsula. In the Bhabur forests of Kumaon, though the tree grows to a large size, the timber is only fit for firewood, and in Kangra and on the Ravi it is only similarly used. The trunk is from 8 to 12 or 15 feet high, generally crooked, but as thick or thicker than a man's body, with numerous spreading branches bent in every possible direction and forming a dense shady head with a grey cracked bark. The wood is soft, and of little use except for fuel. In British Burmah, its soft wood is not used. A cubic foot weighs lbs. 33. In a full-grown tree on good soil the average length of the trunk to the first branch is 15 feet, and average girth measured at 6 feet from the ground is 4 feet. The leaves are collected extensively and sold for cover-leaves for cigars. It is reckoned of the best kinds of wood for kindling fire by friction, and is thought to have furnished the wood from which the Egyptians constructed their mummy cases. The wood and bark are said by Dr. Royle to be accounted a mild tonic. Its fruit is the smaller sebestans or lobestens of European medicine, and its seeds are the chakoon ki binj, *Hind.*, used in powder mixed with oil as an application in ringworm.—*Roxb.* i, 590, *Dr. O'Shaughnessy, p.* 498, *Dr. Royle, Eng. Cyclop., Flor. Andh., Voigt, Dr. Brandis, Mr. R. Thompson.*

CORDIA OBLIQUA, *Willd.*

Cordia tomentosa, *Wall.*
,, Wallichii, *G. Don.; W. C.*
Cordia domestica? *Roth.*

Gondni. Dek.
Lasora. Hind.
Selu. Sans.
Naruvalli pallam. Tam.

This tree is common in the southern provinces of India, and has a small, round, reddish coloured, pleasant tasted, but glutinous, fruit.—*Ainslie, page* 228.

CORDIA POLYGAMA, *Roxb.*

Bottu kuru chettu. Tel.
Pach-cha botuku. Tel.

Found in the Circars, has a strong, close-grained wood, small and crooked.—*Roxb.* i, p. 594.

CORDIA ROTHII. *Ræm. & Sch.*

Cordia cuniata, *Heyne.*

Gondi. Hind.
Bokur. Mahr.
Narvilli marum. Tam.

Dr. Wight believes the wood of all is very inferior, the trees being usually small and Dr. Gibson says that none of the different species or varieties of C. Rothii, C. fulvosa and C. obliqua, gave a timber fit for anything but firewood. They are not uncommon in the Bombay forests, but are more generally met with near cultivated lands and villages.—*Drs. Wight and Gibson.*

CORDIA VESTITA, *H. f. et T.*

C. incana, *Royle.*
Gynion vestitum, *DC.*

Kumbi. Hind.
Karak. Hind.

A small tree of the Siwalik hills and in the Salt Range. Wood valued for wheel-work.—*J. L. Stewart, p.* 153.

CORIARIA NEPALENSIS.

Guch of Panjab.
Tadrelu balel, of Kashmir.
Lichakhro, armura, phaphar chor, &c. of Kangra.
Hanide, padara of Ravi.
Shere of Kanawar.

Grows in the mountains near Deyra Dhoon, Kumaon, Mussoorie, at 5,000 to 7,000 feet. Wood very prettily grained, but of small size. —*Royle, Voigt, Powell.*

CORNUS.

Bhumowra. Hind.

This genus of plants consists of large trees and shrubs. Several species have been found in the Himalaya, in Sylhet, and Nepaul, by Drs. Wallich and Royle; the Cornus oblonga occurs in the Deyra Doon; C. macrophylla, and C. nervosa, at Mussoorie; and Cornus capitata, Wall., (Benthamia fragifera, Lindl.) at a still higher elevation. The fruit of Benthamia is eaten in the hills, and from the seeds of some species an oil is expressed. Wight, in Icones, gives figure of Cornus altera, 1211, sylvestris, 1211; and Zeylanica, 1210-11.—*Drs. Riddell, O'Shaughnessy and Wight.*

CORNUS MACROPHYLLA, *Wall.*

Dogwood. Eng.
Kandar. Panj.
Kandru. ,,
Kochan. ,,
Kohur. ,,
Nang. ,,
Katish. ,,
Kagash. Panj.
Kasir. ,,
Haddu. ,,
Harru. ,,
Harin. ,,
Haleo. ,,
Shka ,,

Grows to a considerable size in the Western Himalaya at elevations from 3,000 to 8,000 feet, wood made into gunpowder charcoal.—*Dr. J. L. Stewart*, p. 14.

CSL

CORNUS OBLONGA, *Wall.*

Ban kukar, PANJABI.	Bakar. PANJABI.

A small tree of the Siwalik hills, grows up to 4,000 feet. Its timber of no special use.—*Dr. J. L. Stewart, p.* 14.

CORONILLA SESBAN ? ? CORONILLA PICTA ? ?

Sohn. URIA ?

Under these doubtful botanical names, Captain Macdonald notices a principal tree, (it is one of the Terebintheæ,) growing in Ganjam and Gumsur, leaves pinnate, 4 pinnæ. Extreme height 50 feet. Circumference 6 feet. Height from ground to the intersection of the first branch, 12 feet. It yields a very heavy wood and of great strength. It is almost exclusively reserved for making posts for pagodas and sacred edifices, the use of it in ordinary house-building being, it is said, forbidden in the shastras. The tree is very common, but owing to this superstition very little use is made of it, the only purposes to which the wood is applied being for making rice-pounders and the wooden stands on which are placed the large grain baskets used in that part of the country. The bark is used for tanning skins and also medicinally by women after child-birth : a sort of fungus or excrescence from this tree is applied externally to wounds and sores, and is also taken internally in colic and affections of the stomach.—*Captain Macdonald.* (The botanical names given are those of the Sesbania Ægyptiaca *Pers.* ; but according to the description it must be some other tree, is it Soymeda febrifuga ?)

CORYLUS, a genus of plants, two species of which *C. lacera* and *C. ferox* are found in the Himalaya mountains. The former, gathered in Kumaon, is hardly different from C. colurna : the other, from Mount Sheopore, has narrow taper-pointed leaves, and excessively hard nuts inclosed in a husk, with divaricating narrow spiny divisions.—*Eng. Cyc., p.* 166.

CORYLUS AVELLANA. The HAZEL. Abundant in the Himalaya, nuts called *Bendick* and *Finduck* in bazars, are grouped in clusters together. By expression, the kernel yields a very agreeable oil, nearly in the proportion of half its weight. The wood of the hazel was the material of the divining rods of the magicians and snake enchanters.—*Dr. O'Shaughnessy, page* 609.

CORYLUS COLURNA, *L.*

C. lacera, *Wall.*	C. Jacquemontii, *Dne.*

Sharoli of Bias.	Wiuri of Kashmir.
Sharoi of ,,	Thangi of Ravi.
Wuria of Chenab.	Sharoli of Sutlej.
Wiri of ,,	Shurli of ,,
Thangoli of ,,	Geh of ,,
Urrni of Jhelum.	

This small tree grows from 35 to 40 feet high on some parts of the rivers of the Panjab Himalaya at a height from 5,500 to 10,500 feet, and has girths of 6 or 7 feet. The wood is light, small, but elastic and compact, used in making rings for counters, knobs, walking sticks. The nuts are called "*findak,*" and are sold in all the bazars.—*Dr. J. L. Stewart, Mr. Powell.*

CORYPHA, a genus of palms, which are valued for different products and employed to supply the place of cordage plants.

CORYPHA AUSTRALIS, the cabbage palm of Illawara, rises to 100 feet, and has a diameter of a foot.—*Bennett.*

CORYPHA ELATA, *Roxb.*

Taliera elata, *Wall.*	Bujoon. BENG.

Grows in Bengal and, according to Mr. Mason, in the Tenasserim Provinces.

CORYPHA GEBANGA, is one of the most useful of all the palms of Eastern Asia. Its pith furnishes a sort of sago ; its leaves are plaited into bags and baskets and used for thatch and broad-brimmed hats ; fishing nets and linen shirts are woven from its fibres, and ropes from its twisted leaf-stalks ; the root is both emollient and slightly astringent ; sliced, is used in slight diarrhœa, for which Waitz says it is a most valuable remedy.—*Eng. Cyc., page* 167.

CORYPHA TALIERA, *Roxb.* ii, 174.

Taliera Bengalensis, *Spreng.*

Tara. BENG.	Talipat. SINGH.
Taliera. ,,	Sri talam. SANS.
Tariat. ,,	Sri talam. TEL.
Taliera. HIND.	

An elegant palm inhabiting Bengal and much employed for making leaf-hats and leaf-umbrellas. The leaves, moreover, when smoothed, are much used for writing on, and also for tying the rafters of their houses, as they are strong and durable. Its trunk is about 30 feet high, and as nearly as possible of equal thickness throughout. The leaves are in about 80 divisions, each 6 feet long by 4 inches broad, radiating from the point of a leaf-stalk from 5 to 10 feet long, and covered with strong spines at its edge. Roxburgh describes the spadix as supra-de-compound, issuing in the month of February from the apex of the tree and centre of the leaves, forming an immense diffuse ovate panicle of about 20 or more feet in height. The fruit is the size of a crab-apple, wrinkled, dark-olive, or greenish-yellow. In Tenasserim, it is known as the book-palm and is not unfrequent in the neighbourhood of religious edifices.—*Roxb.* ii, *page* 174 ; *Eng. Cyc., page* 167, *Dr. Mason, Voigt, page* 641.

GSL

CORYPHA UMBRACULIFERA, *Linn.*

Tali. Beng.
Fan palm. Eng.
Talipat palm. ,,
Talipot palm. ,,
Koda pana. Maleal.
Talagaha. Singh.
Konda panna maram. Tel.
Sidalam. Tel.

The Tala, or Talipat or Talipot palm, is a native of Ceylon, but occurs also on the Malabar Coast. It is similar in appearance to, but its leaves are not so round as those of, C. taliera, the divisions in the centre being shorter than those at the sides. The trunk grows 60 or 70 feet high ; the leaves are 14 feet broad and 18 feet long, exclusive of the stalk, and they form a head about 40 feet in diameter. Fans of enormous size are manufactured from this plant in Ceylon. The dried leaf is very strong and limber—according to Knox, is "most wonderfully made for men's "convenience to carry along with them ; for "though this leaf be thus broad enough to "cover fifteen or twenty men when it is open, "yet it will fold close like a lady's fan, and "then it is no bigger than a man's arm ; it "is wonderfully light." "The bole of this "palm is wholly pith which furnishes a sort of "flour from which bread is made ; they beat "it in mortars to flour, and bake cakes of it, "which taste much like to wheaten bread ; it "serves them instead of corn before their "harvest is ripe." The leaves make excellent thatch, and are also used for writing on, like those of the Taliera. Griffith met with trees in flower at Mergui, which he thought belonged to this species, but not having access to a complete copy of Martius' Palms, he could not speak with certainty. For the same reason, other trees that Dr. Mason saw in Tavoy, were regarded as probably talipat palms. The dark-coloured roundish seeds of these trees are used as beads by the Tader, religious devotees of the sect of Vishnoo called Dasari by the people of Telingana. The Burmese books are all made of the leaf of a species of Corypha.—*Roxb.* ii, *page* 176, *Knox's Ceylon, quoted in Royle's Fib. Pl., Seeman, Eng. Cyc., page* 176, *Ains. Mat. Med., page* 143, *Drs. Mason, Fergusson, Voigt, page* 641.

A small Panjab tree, growing at an elevation of 8,000 to 10,000 feet, with a hard, heavy, close-grained wood, used for walking sticks. Excellent for alpen-stocks, and seems suitable for turning.—*Lt. Col. Lake, Mr. Powell.*

COTONEASTER BACCILLARIS, *Vern.*

Kharwé. Pashtu.
Indian mountain ash.
Lún or lúni. Murree Hills

COTONEASTER OBTUSA, *Wall.*

Luni. Panjab.
Lohan. ,,
Liu. ,,
Lillun. Panjab.
Khatoa. ,,
Kharis. ,,
Riu. Panjab.
Rau. ,,
Reus. ,,
Ri. Panjab.
Sichu of Salt Range
Jalidar ,,

C. obtusa and C. rotundifolia are numerous at 4,000 to 10,500 feet in the Panjab Himalaya. Their wood is small, but tough and strong, and is much used for the smaller beams for roofs, for axe handles, walking sticks, and jampan poles, basket-making and string bridges.—*Dr. J. L. Stewart, p.* 79.

CRATÆGUS CRENULATA, *Roxb.*

White Thorn. Eng.
Gengaru. Panj.

A Panjab tree, on the Sutlej, and to the East of the Panjab and in Nepaul, wood very strong, but small. Used for staves and sticks. Elevation, 3,000 to 7,000 feet.—*Powell, Dr. J. L. Stewart, Roxb.* ii, *page* 509.

CRATÆGUS OXYACANTHA, *Linn.*

Durana. Affghan.
Hawthorn. Eng.
Ban sanjli. Panj.
Sur ,, ,,
Ring. ,,
Ringo. Panj.
Pingyat. ,,
Phindak. ,,
Patakhen. ,,
Ghwanza. ,,

Grows not uncommon on the Western Himalaya, up to 6,000 and 9,000 feet to 25 feet high and 5 feet girth. Character of timber unknown.—*Dr. J. L. Stewart, p.* 79.

CRATÆVA, a genus of plants belonging to the natural order *Capparidaceæ.* The C. religiosa is common in India. The *Ægle marmelos* formerly considered a species of this genus, is now referred to the order Aurantiaceæ. C. Roxburghii grows in India as also does C. nurvala.—*Eng. Cyc., Dr. O'Shaughnessy.*

CRATÆVA NURVALA, *Buch., Ham.*

Cratæva tapi, *Burm.*
Cratæva inermis, *Linn.*

Tapia. Hind.
Birmi. ,,
Nir vala. Maleal.
Mavalingum. Tam.
Maridu. Tel.

A small tree, 15 to 20 feet high, which grows in Malabar and Mysore.—*Voigt.*

CRATÆVA ROXBURGHII, *R. Br.*; *W. & A.*

Cratæva tapia, *Vahl.*
,, odora, *Ham.*
Capparis trifoliata, *Roxb*

Tikto-shak. Beng.
Baroon ,,
Narvala. Can.
Birmi-ki-jhar. Duk.
Three-leaved Caper tree. Eng.
Garlic pear. Eng.
Kurwan. Mahr.
Koomla ,,
Tapia. Sans.
Varoona ,,
Tikta shaka ,,
Narvala. Tam.
Mavilinga maram. Tam.
Tellaulimarra chettu. Tel.
Tella ulimide. ,,
Ulimide. Tel.
Urimidi. ,,
Uru mutti. ,,
Usiki manu. ,,

A tree of both the Indian peninsulas, of the Circars, and growing in Bengal, at Saharunpore. Wood very hard. The native dhol is often made of it, and Ainslie states it is used for many common purposes. Dr. Gibson says the wood is white, and in use by the turners, that it is not a common tree on the Bombay side, and he had not seen it in the forests. The juice and a decoction of its astringent bark is given in intermittent fevers and typhus. *Roxb.* ii. 571, *Voigt, Flor. Andh., Drs. Ainslie, Wight and Gibson, Useful Plants. Voigt.* 74.

CRATÆVA, *Species ? ?*

Boroana. URIA.

A tree of Ganjam and Gumsur, which has not been determined. Its extreme height is 40 feet, circumference 5 feet, height from the ground to the intersection of the first branch, 9 feet. It is tolerably common and burnt for firewood. The bark is used medicinally for wounds.—*Captain Macdonald.*

CROTON SANGUISFLUINA. The Blood-Wood tree of Norfolk Island, said to be of little value except for firewood ; on an incision being made in the bark, a fluid exudes, which is used for marking the convict's slopes, staining furniture, &c., and it is a good tonic and astringent.—*Keppel's Ind. Arch., Vol. II, page* 228.

CRYPTOCARYA WIGHTIANA, *Thw. En.*

C. floribunda. Wight's Icones *nec Nees.*

Golu mora gas. SINGH. | Gal mora ? ? SINGH.

A large tree of Silhet, of Ceylon up to 5,000 feet, and grows in the Western ghats and forests, yields a large wood, valuable for building purposes.—*Voigt.* 309, *Major Beddome, Mr. Fergusson.*

CRYPTOMERIA JAPONICA, *D. Don.*

Cupressus Japonica, *Thunb.*

The Japan Cedar is a tree which is greatly admired. It is a species of pine, not unlike the Araucaria trees of Norfolk Island and Brazil. When growing luxuriantly, it is highly ornamental, rising from the ground as straight as a larch, and sending out numerous side branches almost horizontally from the main stem, which again droop towards the ground in a graceful and "weeping" manner. The wood of the tree has a kind of twisted grain, and possesses great strength and durability. It is highly valued by the Chinese and, from its beauty and straightness, is often used by the Mandarins and priests for those long poles which are generally seen in front of their houses and temples. It is also well known and highly prized by the natives of Japan where it is a most conspicuous tree. It is in high favour with the priests of Buddha, and well deserves to be so. It has been introduced into England.—*Fortune's Wanderings, page* 128, *Fortune's Tea District, page* 212 *and* 304.

CLEIDION JAVANICUM, *Blume,* 272,

Kurugaba, SINGH.

Grows in the Central Provinces of Ceylon up to 2,000 feet. Wood used for ordinary works.—*Wright quoted by Mr. Fergusson.*

CUDDAPAH AND KURNOOL WOODS.

Cuddapah is a Madras collectorate, about 150 miles N. W. of Madras, and the collectorate of Kurnool, borders it on its north. The Nalla Mallai is a mountain range bordering these two collectorates on the east. The hills are covered with dense forests, to their highest peaks, with excellent timber trees, from 30 to 60 feet in height, without a branch, principally, Maddhi, (Pentaptera), Yegis (Pterocarpus marsupium), and Ippa (Bassia longifolia) with a great deal of teak, though much of it is young. Mr. Latham, Resident Engineer, in a letter to Mr. Pinson, dated 12th January 1861, gave the following notices of the woods found on these mountains. The botanical names seem to have been traced out from the vernacular names given in the Cyclopædia of India and from those in Mr. Elliot's Flora Andhrica, but his notices of the characters of the woods, from his professional knowledge, are be regarded as of great value.

I have placed notes of interrogation where further information seems necessary. I have been indebted for this report to Captain Prendergast, Royal Engineers.

Acacia arabica, *Tuma,* Tel. *Kurvalum,* Tam. *Babool,* Hind. A well known and useful timber, used generally.

Acacia leucophlœa, *Tella tuma.* Tel. *Velvaila,* Tam. A hard light-colored wood, streaked with brown ; used for various purposes. The bark is used as an ingredient in arrack distillation.

Acacia odoratissima, *Telsoo,* Tel. *Shinduga,* Tel. *Caroovangah,* Tam. A well known and valuable wood of a light-brown colour, straight fibre, medium weight ; used in large beams, and for general purposes.

Acacia speciosa or flexuosa, *Tella dirasana,* Tel. *Dirasana chettu,* Tel. *Velvengah maram,* Tam. A common tree : colour of wood light-brown, and it is exceedingly strong and durable.

Acacia suma, *Tella sundra,* Tel. A very good, strong dark-red wood, weighty : used for agricultural implements and generally.

Ægle marmelos, *Maradu chettu,* Tel. *Vilva maram,* Tam. This tree is of the orange tribe, and furnishes a close, smooth-grained wood : it does not attain to a large size.

Alangium decapetalum, *Udaga,* Tel. *Alingie maram,* Tam. A very fine wood, though white, it is equal to beech and sustains a weight of 310 lbs. ; it is highly spoken of by Roxburgh : it does not attain a very large size.

Alangium hexapetalum, *Nalla udaga,* Tel. Extreme height 30 feet ; the wood is of use, it is said to be peculiarly adapted for producing sounds. The root is used for snake-bites, it has a great resemblance to beech : it is a yellow colour and slightly cross-grained.

Anisomeles Malabarica, *Mugabira,* Tel., *Mugabira,* Tel. A light wood, useful for temporary purposes.

Anogeissus latifolius, *Sheriman,* Tel. A light-colored compact wood, said to be the hardest and toughest found ; wooden axles for carts are generally made from it, it is also used as posts, beams, &c.

Auckwothee? Tel. Wood sienna colour, much used in bandy work.

Azadirachta Indica, *Vepa,* Tel. *Yapa,* Tel. *Vaypum maram,* Tam. The margosa tree : a very useful wood, used generally in house work by natives.

Bassia longifolia, *Ippee,* Tel. *Elloopi maram,* Tam. A light-colored hard and durable wood, nearly equal to t[illegible] It grows to a large size in Malabar where it is used for spars.

Bauhinia racemosa, *Arree*, Tel. A dark reddish brown, close-grained wood called at Kurnool *Koa Arree*. Used in beams, &c.

Boswellia glabra, *Anduga chettu*, Tel. A soft spongy wood, of little use.

Briedelia spinosa, *Woramen*, Tel. *Moolloo vengay maram*, Tam. A white, close-grained, strong and useful wood; this tree attains a great size in alpine forests.

Butea frondosa, *Moduga chettu*, Tel. This tree is found in Pegu, is called *Poukpin*. The Tamil name is *Porasum*; *Palas* in Sans. *Dhak* in Hind. *Thorus mara* in Can. It is a common tree, thrives everywhere, but the wood is of little value except for gunpowder charcoal. flower deep-red, used as a dye, which is also used for the sectarian marks of the worshippers of Vishnoo and is mixed with kino ? ? to produce the red powder used at the Holee festivals.

Cavallium urens, *Tobisa kurra* or *Tabasa* or *Tunkumanu*, Tel. Its whitish wood is of little use, and is much attacked by the worm.

Chloroxylon swietenia, *Bilugu*, Tel. and *Bilu* at Kurnool. It is a poor sort of satinwood, used for common purposes.

Cluytia collina, *Vidisa chettu*, Tel. *Wodesha*, Tel. *Woadoogoo maram*, Tam. A small tree; wood red coloured, exceedingly hard and durable, with a fine close grain and is easily worked.

Canthium parviflorum, *Balsu*, Tel., called *Beer Chinapah*, at Kurnool. A dark and good wood, of serviceable character.

Capparis grandis, *Keygutti*, Tel. A light sienna coloured wood, close-grained and hard; of medium weight. Is a very useful timber.

Careya arborea, *Buda darinee*, Tel. A very useful wood, dark-red in the centre of the tree and yellow outside: used for large beams.

Cassia fistula, *Rela chettu*, Tel. *Koanny maram*. Tam. A good wood of medium hardness. It is a tree of great beauty when in flower, but on the eastern side of the ghats, is small; it however attains a sufficient size in the forest to provide a good and useful wood. Spars for native vessels are made from it (? ?)

Cathartocarpus Roxburghii. *Uskiamen*, Tel. or *Urimiddee*, Tel. A light strong hard wood, very useful.

Dalbergia frondosa, *Yerra-patseroo*, Tel. *Tella-patseroo*, of the Circars, and the *Peda Sopara* of the Godavery forests. Is a yellowish wood, strong close, and hard. It is a useful timber.

Dalbergia latifolia, *Jitigee*, Tel. *Yerru Gudu*, Tel. *Erroopootoo*, Tam. The rosewood of India, a dark mottled wood, very useful but heavy.

Dichrostachys cinerea, *Vellatura*, Tel. *Vadatala maram*, Tam. Dr. Wight says it is a small tree or large shrub, wood very hard and strong. It grows to some size in the Nalla Mallai, and is a very useful timber: it is in common use.

Diospyros choloroxylon, *Ullinda*, Tel. *Yellinda*, Tel. A straight-grained, compact hard wood, of a light-brown colour: appears a very useful timber.

Diospyros melanoxylon, *Tinkee*, Tel. *Tookee*, Tel. A very good close wood, white on the outside, the centre generally black and heavy: when large a very serviceable timber, the Tamil name is *Toombie maram*, (ebony.) This tree grows to a large size, the centre being black: the white portion is however useful.

Emblica officinalis, *Usrika*, Tel. *Nelly maram*, Tam. *Emblic Myrobolan*, Eng. *Aoula*, Hind. The wood is close-grained and straight, and is used for common purposes: it is a fruit bearing tree.

Erythrina Indica, *Barchanapa*, Tel. *Barjapu chettu*, Tel. A common close-grained light coloured wood, used in building native houses. It is also called Moochy wood, also in Brown's Dictionary Bastard teak, a translation of the Telugu term *Chiri teku*; this term is applied to several kinds of trees with large leaves. On the Naggery hills the Yanadi give it to Dillenia (now Wormia) bracteata.

Ficus Tsiela, *Juvi*, Tel. *Eichie maram*, Tam. A light wood, but like others of the Ficus genus, of little use.

Feronia elephantum, *Vellaga chettu*, Tel. *Vella maram*, Tam. The wood apple tree attains a large size, the wood is rather heavy, light-coloured, hard and durable. It sustained a weight of 860 lbs. (? ?)

Ficus glomerata, *Medi chettu*, Tel. *Kulla Kith mara*, Can. It grows to a height of 40 feet with a circumference of 4½ feet; bandy wheels are made from it. It is straight-grained, strong, and appears useful; it is considered sacred, and is burnt when libations are offered: the fruit is eaten and a medicinal extract is obtained from the root.

Ficus Indica, *Mari chettu*, Tel. *Banyan* tree, Eng. *Ala maram*, Tam. The wood is of little use; the drops or ærial roots yield a heavy hard timber.

Gardenia latifolia, *Bikkee*, Tel. A light wood of little use. Native combs are made from it.

Givotia Rottleriformis, *Tella Poonkee*, Tel. *Boolallie maram*, Tam. A very common tree in Southern India. A light soft wood, like mango wood; useful for temporary purposes.

Gmelina arborea, *Goomer tek* or *Gumudu teken*, Tel. A hard durable wood called at Kurnool *Ghootcky*.

Gmelina Asiatica, *Gumudu chettu*, Tel. A hardish wood of yellow colour; useful.

Grewia Rothii, *Jana*, Tel. A light, ash-coloured wood, with a straight grain, hard and strong, is much used and very serviceable.

Guatteria cerasoides, *Chilka dudugu*, Tel. *Mooleely maram*, Tam. A white tolerably hard wood. The natives use it but little, but it is a useful wood.

Hardwickia binata, *Nar yepa*, Tel. A very dark-red heavy wood, used in large beams: it is often hollow through the heart.

Kodara chettu, Tel. Mr. Elliott describes this "as a kind of tree." It appears to be of little use.

Lagerstrœmia parviflora, *Chinna nagee*, Tel. A light brown, compact, hard, serviceable wood, used generally.

Lookkee, Tel. A fine grained wood, of a greyish colour; found in small quantity.

Maba buxifolia, *Nalla maddee*, Tel. A hard sepia coloured wood, used by the natives for all purposes.

Midudu, Tel. An ash-coloured timber, sound and useful.

Miliusa velutina, *Nulla duduga*, Tel. A pale light yellow soft wood, used for (small) beams; is useful.

Morinda citrifolia, *Maddi chettu*, Tel. *Munjee pavata maram*, Tam. The wood is of a deep brownish yellow, is easily worked, and is used for common purposes. The roots are used in dyeing.

Mangifera Indica, *Mamadi chettu*, Tel. *Mango tree*, Eng. Its wood useful for temporary purposes, is not plentiful in Nalla Mallai.

Nauclea parviflora, *Batte karamee*, Tel. A hard, tough wood, light-red in colour; used as yokes, posts and small beams.

Nella polecki, Tel. A light wood, of coarse grain, unserviceable except for temporary purposes.

Nera, Tel. ? This name is probably incorrect and is used for Nerar the Syzigium jambolana. Balfour calls a నేరేడు Eugenia, (Syzigium) jambolana.

Odina wodier, *Goompinee*, Tel. *Gumpena chettu*, Tel. A soft light-reddish wood, used for general purposes.

Palavarayne, Tel. Wood light, yellow, hard, and is, Mr. Latham thinks, the *Peda kalmesura* of the Northern Circars.

Pentaptera glabra, *Tella maddee*, Tel. *Velmarrodum maram*, Tam. A light yellow wood.

Pongamia glabra, *Kanuga chettu*, Tel. *Poonga maram*, Tam. This large tree attains a great height, flourishes equally well on the arid plains of the Carnatic or on the sub-alpine tracts of Mysore. Roxburgh recommends the wood, which is light, of a whitish colour, and fit for a variety of purposes.

Premna tomentosa, *Nagaru chettu*, Tel. *Navouru* or *Nagool*, Tel. *Kolcutta teak maram*, Tam. The tree is rather small, the wood, hard and close-grained, of a brownish yellow colour; it is more a fancy wood than a timber, and is rather scarce; the natives use the sap in some of their ceremonies.

Prosopis spicigera, *Janum chettu*, Tel. *Purrembay maram*, Tam. This thorny tree attains to a considerable size; the wood is strong, straight-grained, and easily worked, a specimen sustained a weight of 692 lbs. Dr. Wight asks if it is the same as the *Venny maram*. Dr. Cleghorn states that the foliage of the tree and chara[illegible] of the wood closely resembles that of its congener "Acacia sundra."

Pterocarpus marsupium, *Yegis?* Tel. A darkish, coarse-grained serviceable timber.

Pterocarpus santalinus, *Chandun*, Tel. Red sanders wood.

Pulsundra, Tel. This wood is of a reddish colour, strong and useful.

Roodra ganapa, Tel. A light porous wood of little use.

Sarra or *Sarrah*, Tel. This wood is of a dark-grey colour and appears to be readily attacked by the worm.

Schriebera swietenioides, *Makkan*, Tel. A hard yellowish wood, is very useful.

Seecuranee, Tel. This is a white coloured, light, straight-grained wood, would be useful for temporary purposes.

Soymida febrifuga, *Somee*, Tel. *Shem maram*, Tam. *Choar kullie*, Tam. A reddish wood, strong and durable, much used in buildings.

Spathodia Rheedii? *Wodee*, Tel. *Vodi*, Tel. (Is this the Spathodea arcuata, the Tamil name of which is *Kanpillay maram*, as mentioned by Wight?) a white wood, much cut by natives and used in carts and for small beams.

Spathodia Rheedii? *Ganoru karra*, Tel. A soft wood of little use.

Sphœranthus hirtus, *Butta ganapoo*, Tel. *Boda tarupu*, Tel. A wood of light-yellow colour, of medium weight, useful for general purposes.

Strychnos nux vomica, *Musidi*. Tel. *Mushtee*, Tel. *Yetti maram*, Tel. The wood is very hard and strong, and white ants will not touch it. It is used for ploughshares; the poisonous fruits are the favorite food of the Malabar hornbill, Buceros Malabaricus.

Strychnos potatorum, *Chilla*, Tel. *Taita maram*, Tam. The fruit is the well-known clearing nut. The wood is white, close-grained and hard, and is used for implements and rafters.

Syzigium jambolanum, *Nerar*, Tel. Mr. Latham thinks this is the Tamil *Nawel marum*. It is called *Neradee* in Kurnool, and is a very useful wood, of a light sepia colour, of medium hardness, and used generally as planks.

Tamarindus Indica, *Chinta chettu*, Tel. *Polia maram*, Tam. *Onara mara*, Can. The large well-known handsome Tamarind tree. The wood is hard, durable, and fine veined, but apt to be hollow and decayed in the centre, it is the best timber in India for brick-burning, 1½ lbs. for each brick, in large kilns, being sufficient. It is also used in the manufacture of oil (?) and is valuable for its fruit and the shade it affords.

Tectona grandis, *Tek*, Tel *Teak maram*, Tam. The Teak tree; the most useful wood in India. There are very large trees in the interior of the jungle. It is not so good or so heavy as the Malabar teak, but it is superior to Moulmein or Rangoon teak.

Terminalia bellerica, *Thandee*, Tel. A serviceable wood chiefly used as posts. Its colour is yellowish brown and it has a close grain.

Terminalia chebula, *Karaku chettu*, Tel. *Pilla murdah maram*, Tam. It grows to a gigantic size, and furnishes planks 30 feet long: it is a dark coloured, heavy and hard wood, but very cross-grained. It sustained about 400 lbs. The seeds of this tree are used as galls and as an astringent, also as a mordaunt in dyeing.

Terminalia glabra, *Tella muddee*, Tel. *Currai murda maram*, Tam. The tree grows to a large size, and the wood is of a dark-red colour. A dye is obtained from it? it is hard, heavy and strong, 1 inch-bars sustaining a weight from 430 to 450 lbs.

Thandrakya, Tel. An ash-coloured wood, resembles hickory in fibre, is close and tough and would be a very useful wood.

Ulmus integrifolius, *Namille*, Tel. *Nowlee*, Tel. A light-coloured, close-grained wood, used for general purposes.

Wrightia antidysenterica, *Kola mukki chaka*, Tel. *Kodaga chettu*, Tel. A very white wood, used as beams, planks, &c.

Yelluru, Tel. This is used in small quantities, but it appears a useful wood: it is of a light brown colour with a good grain.

Yerra polecki, Tel. A hardish wood of a red colour and very useful.

Zyziphus jujuba, *Renga*, Tel. *Yellanday maram*, Tam. A very good strong wood. The tree never attains a large size, but the wood is much used for cultivating implements.

CULLENEA EXCELSA.

Katu-bodde. SINGH. | Malai konji maram. TAM.

A very large and tall tree, trunk straight, from 60 to 80 feet high. Wood white, rather open-grained, light, apparently not very good, but the outside sap-wood only was examined. Under the microscope, its longitudinal section is very peculiar; altogether such as Dr. Wight had not elsewhere observed. Dr. Gibson had not met with this tree within the Bombay bounds.—*Drs. Wight and Gibson.*

CUMPAS? A light-brown coloured wood of Penang, a large tree; used only for planks.

CUNDALAH PALLAH? A bamboo-coloured wood of Travancore; used for making sandals.

CUPANIA CANESCENS.

Karpa. MAHR. | Amba curb? MAHR.

Tree common in the upper ghat jungles. Wood of average quality, but does not bear exposure. Dr. Gibson had not seen it elsewhere.—*Gibson.*

CUPRESSUS. The Cypress, a forest tree, a is native of the south-eastern parts of Europe, particularly of Italy, but growing in Mexico, and the southern parts of N. America. Its wood is hard, elastic, and strong. It resists worms, and its odour repels insects from whatever may be contained in a cabinet or chest made of it. Its duration is very considerable, but the precise period or the age to which the tree lives have not been clearly ascertained. In some countries this tree is planted over the graves of the dead as an emblem of immortality. There are several species of this genus of evergreen trees. C. Australis of Australia and C. fastigiata, have been introduced into India. C. Horizontalis, the Spreading cypress, is a handsome species, and C. Lusitanica, the Cedar of Goa, has a free mode of growth, with leaves of a singularly glaucous colour. C. Pendula? is the Drooping cypress, or *Goa cedar* of the South of Europe. Oriental physicians used to send their patients labouring under lung diseases to breathe the air of Candia, where the cypress was abundant, in the persuasion that the emanations were particularly wholesome.—*O'Shaughnessy, page* 621, *Eng. Cyc., p.* 258, *Voigt., Dr. J. L. Stewart, p.* 122. *See* CEDAR.

CUPRESSUS FUNEBRIS. The funereal cypress, grows in the Himalaya, and in China. It is a species of weeping cypress, and is a most beautiful tree. Fortune says "It was during one of my daily rambles that

I sa[illegible]e first specimen. About half a mile distant from where I was, I observed a noble-looking fir-tree, about sixty feet in height, having a stem as straight as the Norfolk Island pine, and weeping branches like the willow of St. Helena. Its branches grew at first at right angles to the main stem, then described a graceful curve upwards, and bent again at their points. From these main branches others long and slender hung down perpendicularly, and gave the whole tree a weeping and graceful form." It reminded him of some of those large and gorgeous chandeliers, sometimes seen in theatres and public halls in Europe. Its stem was perfectly straight, like *Cryptomeria*, and its leaves were formed like those of the well known Arbor vitæ, only much more slender and graceful.—*Fortune's Tea Districts, pp.* 61 *and* 62.

CUPRESSUS GLAUCA.

Saras. DUK.

This is a tall, elegant, and graceful tree, well adapted for border walks in a garden, being always green, and a favorite with the natives of India. It grows easily, and is generally planted alternately with Areca. Slips, if taken off before the commencement of the rains, and planted in beds shaded from the sun, take root; each slip should be six inches apart, and if common care is used, one-fourth of the plants will strike and grow. After that, they may be put out in nursery beds, at the distance of one foot from each other, until required for transplanting to where they are to remain.—*Riddell.*

CUPRESSUS SEMPERVIRENS, *Willde.*

Shajr ul Hyat. ARAB.
Saras. DUK.
Evergreen cypress. ENG.
Cypress. ENG.
Sarv. HIND. PERS.
Saro. ,, ,,

It is found in gardens at Ajmeer, Kotah, in the Panjab plains, and up to 5,000 feet in the outer Himalaya, attaining a girth of 6 to 8 feet, and a height of 40 to 45 feet, but it is a native of the warmer parts of Europe, though it has long been transferred to gardens for the sake of its deep evergreen branches and leaves. Among the ancient inhabitants of the Grecian Archipelago, it was customary, upon the birth of a daughter, to plant a *Cupressetum*, or grove of Cypress trees, to be given her for a portion; hence every plantation of this kind was called *dos filiæ*, or a daughter's dower. According to Evelyn, the timber of the Cypress was of infinite esteem among the ancients. It is supposed that the durable bridge built over the Euphrates by Semiramis, was made of this material, and it is reported that Plato chose it to write his laws on, before brass itself. It is certain that it never rifts or cleaves but with great violence; and the bitterness of its juice preserves it from worms or putrefaction. The gates of Constantinople, famous for having stood from the time of Constantine to that of Pope Eugene IV., a period of eleven hundred years, were of Cypress. Its berries and leaves are popularly deemed a panacea for all diseases.——*Roxb.* iii, 653, *Drs. O'Shaughnessy, p.* 621, *Irvine, p.* 208, *Stewart, p.* 222, *Eng. Cyc., p.* 258, *Book of Trees, p.* 200, *Mr. Powell, Voigt, p.* 558.

CUPRESSUS TORULOSA, *Don.*

Deodara of Kulu and the Beas.
Devidiar of Chenab and Ravi.
Twisted cypress.
Leuri, east of Sutlej.
Ne, ur, in Kotgarh list.
Galla, gallaiw or kallian of Sutlej.
Surai of Kamaon.

This tree grows in Bhootan and Neetee, is scarce in the Panjab Himalaya, and also sparingly on the Ravi. It occurs near Simla, on the Parbati, in the Upper Beas valleys. Its elevation is from 5,000 to 8,000 feet. This tree is met with at Kullu on the Ravi and Beas on the Sutlej, at Nynee Tal at 5,000 to 8,000 feet in height, and is found growing 60 to 120 feet high with a girth of 6 to 15 feet. It produces a useful, yellowish, exceedingly fragrant wood, used for beams, for roofs and in-door purposes, but it is too flexible to bear much weight. It has been found most valuable for roofing and other purposes at Nynee Tal.—*Dr. J. L. Stewart*, p. 272, *Mr. Powell, Hand Book, Econ. Prod., Panjab*, p. 576.

CURCUMBARRY, a valley once filled with forest trees, 90 miles west of Madras near Nagery in the North Arcot collectorate, now deforested.

CUTTACK WOODS. The timber trees of this province have only received a partial attention. There were sent 13 specimens of its wood to the Exhibition of 1862, which were furnished by Mr. T. W. Armstrong, Superintending Engineer of the Division, who also gave the following table of their specific gravity, &c., and who mentioned that, for logs over 18 feet, the rates rise:

	Specific gravity water being 1·000.	Price per cubic foot in the log.
Black Sissoo, Dalbergia, *sp.* ?	875	8 Annas
Red Sissoo, Do. ?	1,000	Ditto.
Koossoom URIA?	1,286	5 Annas.
Teak, Tectona grandis	875	10 ,,
Kooroom URIA? or Koossoom URIA	714	4 ,,
Geeringa URIA? or Guringa URIA?	714	6 ,,
Sal, Shorea robusta	1,000	8 ,,
Jack, Artocarpus integrifolia	750	8 ,,
Peasal, Buchanania latifolia	875	6 ,,
Bundhun URIA? or Burdur URIA	1,000	8 ,,
Kochur URIA?	1,250	6 ,,
Abloos or Kandoo		
Assan		

The two *Sissoo woods*, in grain and colour somewhat resembling rosewood, are used for every description of furniture, both by Natives and Europeans. The heart of this timber is generally unsound.

Large quantities of Sal, Shorea robusta, are floated down the Mahanuddy to Cuttack. But, in mature trees, the heart is always unsound.

Burdur is described as an excellent wood for carriage poles, shafts and wheels, and in all coach-builders' work.

Keehur, is a hard useful wood, for mallets, pestles, rammers and the like, and likely to be useful in furniture.

Gumbari is plentiful in Sumbulpore and the Tributary Mahals.

Dhamna, hard but pliable, and makes good felloes.

Kangra, a hard wood.

Abloos or *Kandoo*, Ebony, a very handsome fancy wood, costing 12 annas the cubic foot. The heartwood is of the darkest shade. *See* ASSAN, BURDUR, GUMBARI, GURINGA, KOOSSOOM, KOOROOM.

CYATHEA ARBOREA,

Aspidium arboreum, *Moon*.

Tree fern. ENG. | Æt-musana. SINGH.

This fern rises in Ceylon, 25 to 30 feet. Its stem makes beautiful walking sticks. A section of it well displays the structure of an acrogenous stem, hollow in the centre, marked on the outside by the scars of the fallen leaves, and showing the elongation of the axis by junction of the petioles.

CYATHEA MEDULLARIS. The tree fern of Norfolk Island, is about twenty feet in length, and presents a beautiful appearance.

CYATHOCALYX ZEYLANICUS, *Champion, H. f. et T.*

Kakalas. SINGH. | Eepettas, SINGH.

A tree of Hantani, Kandy and Newera Elia in Ceylon and of the Malay Coast, at Mergui and Tenasserim. The light-lacquered Kandyan sticks are said to be made from this.—*Hook. f. et Thomson, pp.* 126, 127, *Mr. Fergusson.*

CYCLOSTEMON ZEYLANICUM, *Bail.*

Sphragidia Zeylanica, *Thw.*

Grows in Ceylon, and abundantly on the Anamallai Hills, at 2,000 to 3,000 feet of elevation, yields a hard wood.—*Beddome.*

CYMINOSMA PEDUNCULATA, *D.C.*

Ankoonda. SINGH.

A very small Ceylon tree. Wood very white, suitable for inlaying purposes and for charcoal.—*Thurstan, quoted by Mr. Fergusson.*

CYNOMETRA RAMIFLORA, *Linn.*

Cynometra cauliflora, *Wall.*

Branch-flowered cynometra. ENG.
Iripa. MALEAL.
Gal mendora. SINGH.
Hal „ ? „

A tree which attains a height of 60 feet growing in Malabar, in Java, the Moluccas, Sumatra, and in the western, eastern and southern provinces of Ceylon, at Batticaloa and Trincomallee. A cubic foot weighs 56lbs., and it is said to last from 15 to 60 years. It is used for bridges and buildings, and is the best kind of wood for under-ground purposes. Its roots, leaves and an oil from the seeds are used medicinally.—*Mr. Mendis, Useful Plants, Voigt, Thwaites.*

CYRTOPHYLLUM FRAGRANS.

Anan. BURM.

Grows in Moulmein. Is one of the nux vomica tribe, and one of the hardest, most compact, and heaviest woods known.—*Cal. Cat. Ex.* 1851.

CYTISUS CAJAN, *Linn.*

Cajanus Indicus, *Spr.*

Toovaray. CAN. TAM.
Tooar. DUK. MAHR.
Pigeon Pea. ENG.
Urhur. HIND.
Shakhool. PERS.
Adaki. SANS.
Kandaloo. TEL.

One of the plants employed in the Bengal Powder works at Eshapore and in that of Bombay, in the manufacture of gunpowder charcoal. It might probably be employed in the manufacture of pyroligneous acetic acid.—*Beng. Phar., p.* 235.

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DACRYDIUM CUPRESSINUM, the Remu tree of New Zealand, and the spruce fir of Captain Cook, attains the elevation of 80 or 90 feet, but seldom exceeds 15 feet in circumference. The timber is white and hard, but is heavy, and sinks in water, and is therefore less valuable for spars, and is not so durable as the Kowrie tree. A gum resin exudes from it, and its bark is used for dyeing black or yellow.—*Bennett's Gatherings*, p. 412.

DACRYDIUM EXCELSUM, the Kaikatea of New Zealand, is the loftiest timber tree of that island, has an attractive appearance, attains a height of 120 to 130 feet, and 12 to 16 feet in circumference. It grows usually in moist localities, is of slow growth but has a soft timber. It is not fit for spars, being liable to splinter, and is unfit for planks, as it warps and is deficient in strength and durability.—*Bennett's Gatherings*, p. 414.

DACRYDIUM MAI, The "Mai" tree

of New Zealand, attains a height from 80 to 90 feet and a circumference of 10 to 12 feet. Grows more abundantly inland. Its wood is of a red colour, somewhat resembling cedar, and is of excellent quality. It rises to 30 feet and has a circumference of 6 feet. The "torin" or New Zealand flute is made from this tree. *Bennett's Wanderings.*

DAGOO THA, BURM. ? meaning Crooked Timber ; maximum girth 3 cubits, maximum length 30 feet. Found abundant in Tavoy and Mergui. When seasoned, floats in water. It is used for building boats, for planks of houses, ladders, &c., but is liable to attacks of worms and dry rot.—*Captain Dance.*

DALBERGIA, a genus of plants, belonging to the Fabaceæ, several species of which furnish useful and ornamental woods. Besides such as will receive special notice, may be mentioned, D. emarginata, a tree of the Andaman islands ; D. reniformis, a tree of Sylhet, and D. pulchra, of the Khassya hills. Species of Dalbergia furnish the famous Bombay Blackwood, called Rosewood, and so commonly used for furniture.—*Roxb.* iii, *pp.* 224, 226, *Voigt, Mr. Fergusson.*

DALBERGIA, *Species ?* Chisel-handle tree. A common forest tree of Tenasserim, produces a hard, fine-grained wood. The Karens call it the egg tree, and Burmese the chisel-handle tree, its wood being much used for chisel-handles. Dr. Mason had not seen the flower, but he says he identified the fruit with Roxburgh's genus Dalbergia.—*Dr. Mason.*

DALBERGIA, *Species ?* There is a large timber tree found throughout the Tenasserim Provinces, sometimes wrought into canoes, which Dr. Mason thinks is a species of Dalbergia, but he had never seen in it flower. It is the tree of which, according to Burman geography, there is an immense specimen growing on the Great Eastern Island.—*Dr. Mason.*

DALBERGIA, *Species ?* Myouk-sho, BURM. Called Moulmein Lancewood, also called Monkey tree, because its bole is so straight, so slippery, and to so great a height free from branches that no monkey was ever seen to climb it. Maximum girth 4 cubits, maximum length 40 feet. Found very abundant in Tavoy and Mergui : also somewhat abundant all over the provinces inland. When seasoned, floats in water. The wood is much praised in Tavoy, as resembling lancewood in properties, but was found to split when seasoned : perhaps good specimens have not been obtained. At any rate, other woods of unquestionable value are abundant in Amherst. The Karens make bows of it, but prefer Cassia fistula. Dr. Mason never met with the tree in flower, but he thinks it a species of Dalbergia, though it may possibly be a Cassia. —*Captain Dance, Dr. Mason.*

DALBERGIA, *Species ?* Myouk-shaw, BURM. A tree of Moulmein. Wood used in ordinary house-building.—*Cal Cat. Ex.* 1862. (*Note.*—Is this identical with the preceding ?)

DALBERGIA, *Species.*

Thapya. BURM. | Water Dalbergia. ENG.

A tree of Moulmein. Wood used in ordinary house-building.—*Cal. Cat. Ex.* 1862.

DALBERGIA, *Species.*

You-dine. BURM.

A tree of Moulmein. A hard heavy black wood, useful for furniture.—*Cal. Cat. Ex.* 1862.

DALBERGIA, *Species.*

Yen-dike. BURM.

Common in the plains and on the hills of British Burmah, particularly at Yendike which takes its name from this tree. Yields a kind of blackwood well worth notice. The sap-wood of this tree decays rapidly, but the heart-wood is extremely durable, it is black, sometimes with white and red streaks, elastic, but full of natural cracks. Used for ploughs, bows, handles of dahs and spears. There are probably two kinds in the province. A cubic foot weighs lbs. 64. In a full-grown tree on good soil the average length of the trunk to the first branch is 35 feet, and average girth measured at 6 feet from the ground is 9 feet. It sells at 12 annas per cubic foot. Dr. McClelland says there are, in Burmah, four kinds of Dalbergia, all yielding a heavy timber, which will not float, similar to Sissoo. These trees are very plentiful in the Tharawaddy and Hlaine districts, also in the lower parts of the Tounghoo district. The timber seldom attains a very large size and is generally found of a girth of three or four feet, taller and straighter than Sissoo.—*Drs. Brandis, and McClelland, Cal. Cat. Ex.* 1862.

DALBERGIA, *Species?*

Yendike. BURM. | Blackwood. ENG.

Under these names Captain Dance describes a timber of maximum girth 2 cubits, maximum length 10 or 12 feet. Found abundant all over the provinces, but mostly in Tavoy and Mergui. When it is seasoned, it sinks in water. This, he says, unlike the Blackwood of India, has a fœtid smell like that of new Corduroy and a white grain interspersed amongst the black and red. It is not so handsome a wood as Indian blackwood, but is far tougher, is not brittle, and is excellent for spokes, halves, for handles of screw drivers, augers, gimlets. Used by the Chinese carpenters for planes, and is excellent for that pur-

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pose though heavy; but they use smaller planes than we do. Like others of the hardest woods of Burmah, it is so full of natural cracks, that two feet of timber are wasted for one foot made up after being sawn; but, when made up, this wood cracks no more and resists sun and rain admirably. The "Tai" he says is not Yendaik but Ebony, and is brittle and devoid of smell. Dr. Mason tells us that, under the Burman name of yendaik, the wood of two different trees is sometimes seen. One, a species of ebony, and the other a leguminous tree which, according to the descriptions of the Karens, is a species of dalbergia, and the wood resembles the blackwood of Hindostan. —*Dr. Mason, Captain Dance.*

DALBERGIA, *Species?*

Thevus. HIND. | Thevis. MAHR.

In Nagpore, a light-coloured wood merging into a light-reddish brown. Its strength is considerable, and by the natives the wood is highly prized for bandies. White ants attack it. Only a small supply is obtainable. Its average length is 15 feet, and average girth $3\frac{1}{2}$ feet. It sells at 6 annas the cubic foot.—*Captain Sankey.* (*Note.*—Is this D. Oojeinensis, Roxb. Fl. Ind., III, p. 220.)

DALBERGIA ACUMINATA, *Ains.*

Sissa. CAN.
Sessu tree. ANGLO-HIND.
Sesso. HIND.

Dr. Ainslie describes this as growing in Oude, Behar and Canara, as furnishing a valuable wood, employed for the knees and frames of ships.—*Mat. Med., p.* 210.

DALBERGIA ALATA?

Tsouk-yoa. BURM.

A tree of Moulmein. Used for tool handles. —*Cat. Cat. Ex.* 1862.

DALBERGIA FRONDOSA, *Roxb.; W. & A.; W. Ic.*

Dalbergia arborea, *Heyne.*

Erra pachchari. TEL. | Pedda sopara. TEL.

In Ceylon, not uncommon in the central provinces and elsewhere up to an elevation of 3,000 feet. Grows on the Bombay side, at Colemala, Courtallum, and in the mawuls above the ghats, in the Godavery forests and in the Circars; also in Pegu where it attains a girth of four feet and upwards, and is taller and straighter than the Sissoo. It furnishes a strong useful timber.—*Roxb.* iii., 266, *Fl. Andh., Capt. Beddome, Dr. McClelland, p.* 10, *Thw., Voigt,* 241.

DALBERGIA LANCEOLARIA, *Linn. fil.*

Nedun. SINGH. | Nendoon. SINGH.

Described as growing in the western and southern provinces of Ceylon, and its wood as employed in buildings and for furniture. A cubic foot weighs 56 lbs., and it lasts from 60 to 80 years.—*Mendis.* See *D. Mooniana.*

DALBERGIA LATIFOLIA, *Roxb.; W. & A.*

Seesoo. MAHR.
Shwet Sal. BENG.
Sit Sal. ,,
Yendike? BURM.
Bitti. CAN.
Todigate Vriksha. CAN.
Sweta-shala. DUK.??
Rosewood Tree. ENG.
Blackwood Tree. ,,
Malabar Blackwood Tree.
Sweta Sal. HIND. ??
Sheshum of Central India.
Iti. MALEAL.
Eruputtu maram. TAM.
Iti. ,,
Korin-toware. ,,
Virugaduchava. TEL.
Yerrugudu. ,,
Jittegi. ,,
Nalla Irugudu. ,,
Tella ,,

This tree grows in the peninsula and northern parts of India, in more or less abundance; in the Godavery forests, the Circar mountains, in Coimbatore, Malabar, Canara and Sunda, the S. Konkan, on the banks of the Kali Naddi river, in the Southern Mahratta Country, the N. W. Provinces, in Bengal, the Khassia hills, and in Assam: and, on the Coromandel and Malabar Coasts. It grows to an immense size, the trunk sometimes measuring 15 feet in circumference, exclusive of the bark. It is one of the largest mountain trees of India. In Coimbatore, it is less abundant than the eatty maram, perhaps from being more sought after as yielding more valuable timber; it is, there, a very dark, heavy and strong wood, sustaining a weight of 515 lbs. Everywhere, in Southern India, this valuable wood has risen much in price, the two indents from the Madras and Bombay Gun Carriage Manufactories amounting, in 1858, to 5,000 cubic feet. In Canara, this tree was formerly given to applicants at 3 Rupees each; but that practice has been disallowed. There is not much black wood remaining in the Anamallai Forest, but there is a considerable quantity in the escheated forest of Chennat Nair, and it is abundant in Wynaad and Coorg. In consequence of its increasing value, instructions were given, in 1858, for an experimental sowing at Nellumboor, with what result is not known. In Canara and Sunda, it is abundant and large at north end of Dandelee forest; scanty elsewhere. It is rather common in most of the Bombay coast forests, particularly in ravines of the hills and under the Ghats, also on the Ghats; but, there, it never reaches the great size which it attains in Malabar. It is also often crooked. The wood is extensively used for cabinet work, knees of vessels, agricultural implements, combs, &c. It appears, in density of grain and endurance, to be much superior to the Sissoo of Hindostan. The wood of the centre of the trunk and large branches, is greenish or greenish-black, often mottled, or with light-coloured veins running in various directions. It is close-grained, admitting of the finest polish, and is employed

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for furniture of every description, and, in the Madras Gun Carriage Manufactory, for light field beams, cheeks, axle cases, braces, perches, poles, splinter bars, waggon perches and framing, light field spokes and felloes. For gun-carriages it is so valuable that large plantations have been formed in waste places of the North-western provinces of Hindostan. In Malabar, it is the magnificent tree from which the well known Malabar blackwood is obtained, and planks 4 feet broad are often procurable, after all the external white wood has been removed: it is heavy and close-grained, admitting of fine polish and is very much used for furniture. It is one of the most valuable woods of the Madras presidency.—*Roxb.* iii, 221, *Drs. Roxburgh, Wight, Gibson and Cleghorn, Voigt, Flor. Andh., Captain Beddome, Major Pearson.*

DALBERGIA MOONIANA, *Thw.: Moon's Cat., p.* 51; *folios* 5-8.

D. lanceolaria, *Linn. fil.* | Nadoong-gass. SINGH.

A great tree, which grows in the southern and central parts of Ceylon, at no great elevation.—*Thw. En. Plant. Zeyl., Part II, p.* 93. *See* D. LANCEOLARIA.

DALBERGIA OOJEINENSIS, *Roxb. W. Ic.*

Thevus of Nagpore.
Tevus. MAHR.
Tennus. ,,
Tunnus. ,,
Tonisha. SANS.
Sojanduna. SANS.
Ati muktamu. TEL.
Manda motuku. ,,
Nemmi chettu. ,,
Tella motuku. ,,

A tree of 30 feet high, grows in the valleys of the Himalaya, in the Panjab, in the warmer valleys of Kumaon, the Kheree jungle, Dehra Dhoon, Kumaon, Sirmore, in Oude, the Central Provinces and the Godavery forests. Found both in the Konkan and inland Bombay forests, especially common in some parts of Kolwan, Khandeish, and the Satpoora Hills. The best trees in the Central Provinces are in Mundla near Ramnuggur and in the S. W. of Raipore. It is a wood of great strength and toughness, especially applicable for cart-building, ploughs, &c., seldom reaches a size sufficient to give a plank of 9 inches. The wood of that which grows on the Godavery is valuable, but the tree is rather rare there.—*Roxb.* iii, 220, *Voigt, Fl. Andh., Useful Plants, Dr. Gibson, Captain Beddome, Major Pearson, Mr. R. Thompson.*

DALBERGIA OOATA ? ?

Tsouk yo. BURM.

A tree of Moulmein. A tough wood: much used for tool handles.—*Cal. Cat. Ex.* 1862.

DALBERGIA PANICULATA, *Roxb.; W. & A.*

Hasur gunni. CAN.
Patchalay wood. ANGLO-[TAM.
Phassie. MAHR.
Patchalai maram. TAM.
Pachchari. TEL.
Porilla sapara ,,
Tella pachchari. ,,
Tella patsaroo. ,,

This tree grows in Moulmein, Assam, Oude, in the Northern Circars, in the Godavery forests, Coimbatore, at Courtallum, in the Mawul districts, and above the ghats. In Coimbatore, it attains a considerable size, and the timber is said to be strong, and fit for many purposes. It is rather common in most of the Bombay forests, both of the coast and inland. The wood there is light-yellow, strong, compact, and fit for many purposes in house-building, agriculture, &c. But, Captain Beddome tells us of Porilla sopara, (Godavery) Tella patsaroo (Circars) *Tel.* Dalbergia paniculata, that the wood is perfectly useless—it is arranged in rings with softer substance in between the layers. Voigt tells us that it is white and firm but less useful than some of the other species. The character of the wood would thus seem to vary according to locality.—*Roxb.* iii, 227, *Drs. Wight and Gibson, Voigt, Captain Beddome, Voigt.*

DALBERGIA ROBUSTA, *Roxb.; W. Ic.*

Dalbergia Krowree, *Roxb.* | D. latifolia, *Gibson.*

This tree grows in Nepaul, Assam and Pegu, where it is very abundant, and attains a girth of four feet and upwards, and is taller and straighter than Sissoo. In Kumaon, it is a remarkably handsome tree, grows in shaded valleys to 40 or 50 feet high and 5 or 6 in girth. Its wood is elastic and might be substituted for Sissoo.—*Roxb.* iii, 229, *Voigt, Dr. McClelland, p.* 10, *Mr. Thompson.*

DALBERGIA SISSOIDES, *Grah.*

Rose wood. ENG.
Black wood. ,,
Eatty maram. TAM.
Biti maram. TAM.
Vitty maram. ,,
Kar-itti. ,,

Dr. Wight says that this is perhaps the best known in the Coimbatore jungles, of the trees yielding blackwood, but there are several others as good or perhaps better. It abounds in the Palghaut forests, but, in 1850, was rarely to be met with of great size; when it and its congener Dalbergia latifolia are carried to Madras it becomes one of the rose woods of the furniture shops. It is a smaller tree than D. latifolia, but more common in the forests. Both yield a blackwood, and in Madras are indiscriminately called "Rose-wood." The wood contains much oil, which unfits it for receiving paint Mr. Rohde says that this, the blackwood or East India Rosewood, is one of our best woods for plain furniture, though at Madras it is said to cast about a good deal; by experiment he found it to be one of the strongest timbers we have in the Circars, he is inclined to believe that the wood imported from the Western Coast is not equal in strength to the smaller but closer grained wood of the Circars, and the appearance of the latter is more veined, and he thinks

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closer in the grain than that of the Western Coast—the wood contains much oil which renders it unfit for receiving paint—logs are almost invariably faulty in the centre: as a tough strong wood it will be found useful whether curved or straight. Dr. Gibson does not recognize this as a species distinct from Dalbergia latifolia.—*Dr. Gibson, Mr. Rohde and Dr. Wight in Cat. of Ex. of* 1851, *Dr. Cleghorn in Madras E. J. R.*

DALBERGIA SISSOO, *Roxb., Fl. Ind., III*, 223.

Pterocarpus sissu, *Roxb.*

Sissoo wood. ENG.
Sissu. HIND.
Tali, also Shisam and Sisam of Panjab.
Safeda. ,,
Nelkar ,,
Shin. PANJAB.
Shishai. ,,
Shia. ,,
Yerra-chava kurra. TEL.
Sissoo. TEL.
Sissowa. URIA ?

This tree grows in northern India, Nagpore, Guzerat, in the hills about Nagotnah, and Kennery jungles. It is a native of Bengal and the adjoining provinces to the northward where the timber is much prized. It grows indigenous in the western Himalaya up to 4,500 feet, also in the Kachhi forest, on islands opposite Bunnoo and on other Panjab rivers, and generally over the Panjab. Its timber in the Panjab is hard, strong and heavy, a cubic foot weighing lbs. 68 when green, and lbs. 48 when dry. It is very durable. It is used for gun carriages, in dock-yards, and boat-building, for furniture, building, boxes, and camel saddles. Sissoo is scarce in the hills of Ajmeer, but more abundant in Kotah. In Nagpore, logs of it are procurable from 10 to 15 feet long, and 3 to 2½ feet in girth, at 6 annas the cubic foot: it is said to attain a great size in Chandah and is said to have been employed there in ornamental work, domes of gharries, &c., but Major Pearson thinks that Tinnus or Thevus wood has been mistaken for it. It was introduced into the Madras Presidency from Bengal at the recommendation of Dr. Wallich, and has been planted on the banks of the Toomboodra, where it is said to be thriving wonderfully; it is growing extensively in the cantonment of Masulipatam, as an avenue tree, and has been planted in some places on the banks of the Kistnah anicut. The trees thrive well at Masulipatam, and from their appearance, Mr. Rohde thinks it would thrive well in the Madras provinces. Its rapid growth recommends it for avenues, for the tree attains perfection in 28 years, it is propagated and reared with facility, and early attains a good working condition of timber. The wood is greyish-brown with darker coloured veins, very strong, but said to be not very durable. It is used in Bengal for gun carriages, and furnishes the Bengal ship-builders with their crooked timbers and knees, being remarkably strong, but not so durable as could be wished; it answers well for various other economical purposes. Captain Macdonald tells us that, in Ganjam and Gumsur, it has a circumference of 4½ feet, and height from the ground to the intersection of the first branch 15 feet, and furnishes the material of which tables, chairs, couches, book-stands and other articles of furniture are usually made in that part of the country. It is not so plentiful as it was, being in great request. In the Dekhan, the wood is used principally, from its strength and natural bend, for native carts: when it can be procured long and straight, it makes good shafts for buggies. The wood of the Ajmeer tree is very dark and beautifully veined, like rosewood. Upon the whole, there is scarcely a tree which deserves more attention; for, when its rapid growth in almost every soil, its beauty and uses are taken into account, few trees can be compared with it. Major Campbell's estimate of the value in practice, of this wood, is 96, being higher than that of the best specimens of teak. Wood hard, strong, tenacious and compact, whilst its great durability combines to render it one of the most valuable timbers known. Dr. Wallich and others have recommended it for plantations, showing the probable return. Flowering time, the beginning of the hot season: the seed ripens about the close of the year.—*Roxb*, iii, 223, *Voigt, Captain Macdonald, Mr. Rohde's MSS., Dr. Irvine's Genl. Med. Top. of Ajmeer, p.* 203, *Drs. Riddell, Cleghorn, Roxburgh and J. L. Stewart, p.* 66, *Captain Sankey, Major Pearson.*

DAL BULLOO GEERA, CAN. Grows in Canara and Sunda, on the elevated plateau between Gungawalee and Black rivers, does not reach a great size. Wood very strong and tough, sought after for agricultural implements.—*Dr. Gibson.*

DALECHAMPIA POMIFERA.

Douk-ya mah. BURM.

Scarce, but met with on the banks of streams in the Pegu Valley, particularly in the Pymmah Choung. The trees are from three to four feet in girth. Wood, red or dark-brown, and adapted for cabinet-making.—*Dr. McClelland.*

DALOSINGHA OR TALOOSINGHEE, URIA ? A tree of Ganjam and Gumsur, extreme height 25 feet, circumference 1½ feet, and height from the ground to the intersection of the first branch, 6 feet. Abounds, and is burnt for firewood and charcoal. Ploughshares are sometimes made of the wood.—*Captain Macdonald.*

DAMARLOUT ? A wood of Penang of a brown colour. Used for building and general purposes.—*Col. Frith.*

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DAMINNE, SINGH. A tree of the Eastern provinces of Ceylon. A cubic foot weighs 44 feet, and it is calculated to last 40 years. It is used for gun-stocks and common house-buildings.—*Mendis.*

DAMMARA AUSTRALIS, was discovered by Captain Cook in New Zealand. It is called Kowrie by the natives.—*Bennett.*

DAMMARA MACROPHYLLA, *Lindley.* Grows in New Hebrides.—*Bennett.*

DAMMARA MOORII, grows in New Caledonia.—*Bennett.*

DAMMARA OBTUSA, *Lindley.* Grows on the island of Aneitum and other islands in the New Hebrides.—*Bennett, Voigt.*

DAMMARA ORIENTALIS, *Rumph.*

D. alba, *Rumph.*
Agathis loranthifolia, *Salis.*
Pinus dammara, *Lamb.*

Pitch tree of Amboyna.—*Bennett.*

DAPHNE OLEOIDES.

Kutti or Kutilái of Murree Hills Hazara, and elsewhere.
Zhikak of Kanawar.
Laghunai PASHTU.

The wood is hard and white but its chief value is from its bark, used medicinally.—*Powell.*

DASYAULUS, *Thwaites.* Several species occur in Ceylon, middle-sized trees, viz., D. fulvus, at Hewessee in the Pasdoon Corle: D. microphyllus, in the south, but rare: D. Moonii, at Caltura near Ratnapoora: and D. neriifolia, "Gang mee," *Singh.*, common on the banks of rivers and streams in the warmer parts of the island. The last is the Bassia neriifolia of Moon's Catalogue.—*Thwaites.*

DASYAULUS NERIIFOLIA, *Thw.*

Bassia neriifolia, *Moon.*
Gan-mee. SINGH.

A common tree of Ceylon left for shade in the various Cinnamon Gardens. Timber used for common purposes.—*Mr. Fergusson, Thwaites.*

DAUP-YAN. A Tavoy wood, used for building.—*Col. Frith.*

DAUP-YAT. In Amherst, a timber employed for rafters; it is a beautiful yellowish-white compact wood, but has a tendency to split. The leaves are used as a dye.—*Captain Dance.*

DEALS.

Deler. DAN.
Deelen. DUT.
Deal boards. ENG.
Sawn wood. ,,
Planches minces. FR.
Dielen. GER.
Tavole. IT.
Piane. ,,
Tarcice. POL.
Doski. RUS.
Tiljor. SW.

See Introduction.

DELIMA SARMENTOSA, *Linn.*

Grows in the southern parts of the island of Ceylon, up to an elevation of 1,000 feet—*Thwaite's En. Pl. Zeyl.*, p. 21.

DENDROCALAMUS. A genus of bamboos. D. balcooa, prized for its solidity and strength, grows in Bengal. D. strictus, of the peninsula, is used for spear shafts, and D. tulda is the common bamboo of Bengal.—*See* BAMBUSA.

DENKENACOTTA, the finest forest, in the Salem collectorate of the Madras Presidency. It contains sandal wood, acha wood.—*Cons. Rep.*

DEREAH. HIND.

Dareah. HIND.
Bhera. MAHR.

A wood of the Nagpore forests: though of great strength, it cannot, from the small size the tree attains, rank as a building material: the average logs are from 6½ to 10½ feet long, and from 3 feet to 2 feet in girth. It has a winding and, as it were, netted grain, from which, as well as the extraordinary toughness of its fibres, butchers invariably use it for chopping blocks; the sharp edge of the knife apparently having no effect on it.—*Captain Sankey.*

DESMODIUM TILLÆFOLIUM.

Chamkat of Murree.
Kalanchi of Panjab.

Grows in the Panjab, wood of a pale whitish yellow and close-grained. Its bark is made into paper, very strong, temporary ropes are made from the bark of D. argenteum, which grows on the Sutlej and in Kanawar.—*Powell, Hand Book.*

DESMOSTEMON ZEYLANICUS, *Thw.*

Wal-kakunu-gaha. SINGH.

Grows in Ceylon, in its Central Province, up to 4,000 feet. Timber used for ordinary work.—*Wright, quoted by Mr. Fergusson.*

DEUTZIA STAMINEA.

Phul kanri. Hazara.
Phurili of Kashmir.
Sai. or (Chamba.),
Aruchi, deus, of Bassahir.

A small-sized Panjab wood, white and close-grained.—*Powell.*

DHAMNA, URIA? A tree of Cuttack which makes good cart-wheel felloes, and is hard, but pliable.—*Cal. Cat. Ex.* 1862.

DHAMNA, HIND.? A reddish-coloured wood, strong, very plentiful in the Santhal jungles from Raneebahal to Hasdiha or about forty miles. Used chiefly for cart-wheels.—*Calcutta Engineers' Journal, July* 1860. (*Note.*—These two seem identical as to quality of timber: are they the Grewia tiliæfolia?)

DHAN DHAUTA, HIND.? A tree of Chota Nagpore, with hard, white timber.—*Cal. Cal. Ex.* 1862.

DHANNEE, TAM. A dark-coloured wood of Travancore, specific gravity 0.733. Very strong, but knotty, used for common buildings.—*Col. Frith.*

DHAON CHOTA of Jhullundur. An underwood, which grows 4 or 5 feet high, used for fuel and by liquor distillers for fermenting liquor.—*Lieutenant-Colonel Lake, Commissioner, Jhullundur Division.*

DHARINJO, URIA. A tree of Ganjam and Gumsur; extreme height 60 feet, circumference 4 feet, and height from the ground to the intersection of the first branch, 8 feet. Tolerably common. No use seems to be made of the wood. The bark is used medicinally by women after child-birth; the juice of the leaves is supposed to cure itch.—*Captain Macdonald.*

DHELA KATA, HIND.? A tree of Chota Nagpore, with hard, yellow timber.—*Cal. Cat. Ex.* 1862.

DHEWUS, HIND.

Dhaves. HIND.
Dhivus. MAHR.

A timber of Nagpore, of a light colour. It is devoured by white ants, and is only procurable of a small scantling, from 12 to 15 feet long and two feet in girth. Its length, however, is considerable, and, if found of a proper size, would doubtless be valuable. The young trees are all cut down for bandy poles. It sells at 8 annas the cubic foot.—*Captain Sankey. (Note.*—Is this Dalbergia Oojeinensis?)

DHIMEREE, URIA? A tree of Ganjam and Gumsur; extreme height 40 feet, circumference 4½ feet, and height from the ground to the intersection of the first branch, 8 feet. Bandy wheels are sometimes made of the wood, but it is chiefly used for firewood, being tolerably plentiful. It is considered sacred and is burnt when libations are offered. The fruit is eaten: a juice extracted from the root is used in rheumatism.—*Captain Macdonald.*

DHOBOO, URIA? A tree of Ganjam and Gumsur; extreme height 36 feet, circumference 3 feet and height from the ground to the intersection of the first branch, 15 feet. There are two kinds of this tree, the "Nongoliah" and the "Pooro," both of which are very common. It seems to be only used for firewood.—*Captain Macdonald.*

DHÓBO KHOIRO, URIA? A tree of Ganjam and Gumsur; extreme height 25 feet, circumference 2 feet, height from the ground to the intersection of the first branch, 6 feet. A white variety of the same species occurs. Both trees are very common—*Captain Macdonald.*

DHOO, URIA? A tree of Ganjam and Gumsur; extreme height 45 feet, circumference 4½ feet, height from the ground to the intersection of the first branch 22 feet. This tree abounds and is extensively used for fuel. The wood is of little value.—*Captain Macdonald.*

DHOSORA KHENDOO, URIA? A tree of Ganjam and Gumsur; extreme height 60 feet, circumference 5 feet, and height from the ground to the intersection of the first branch, 18 feet. The wood is used for ploughshares and bandies, is tolerably common and is burnt for firewood. The fruit is eaten.—*Captain Macdonald.*

DHOWA, HIND.? A whitish-coloured wood close-grained and hard. Plentiful in the Santhal jungles and hills from Raneebahal to Hasdiha, a distance of about forty miles. The wood of it is chiefly used for cart-wheels, beams, and door-posts by the natives, also for mallets and tent pegs.—*Calcutta Engineers' Journal, July* 1860. (*Note.*—Major Pearson, C. P., says "*Dhowa*—I suspect this is only *Daoura*" and Major Beddome regards it as Anogeissus latifolia.)

DIALIUM OVOIDEUM, *Thw.*

Galsyambala-gas, SINGH.

Wood strong and handsome; well adapted for ornamental furniture.—*Thwaites*, quoted by *Mr. Fergusson.*

DICHROSTACHYS CINEREA, *W. & A*

Mimosa cinerea, *Linn.; Roxb.*
Desmanthus cinereus, *Willd.*
Acacia cinerea, *Spreng.*
" dalea. *Desv.*

Vurtuli. HIND.
Andara gass. SINGH
Wara-tara. TAM.
Veda-tara. "
Vadatala maram. TAM.
Veluturu. TEL.
Yel-tur. "
Velliturn. "
Venuturu. "

Abundant in the hot and drier parts of Ceylon. It is a small scrubby tree or large shrub in Coimbatore and common in waste places of the inland country, in the Bombay Presidency. Dr. Gibson had not seen it near to the coast. The wood is very hard and very tough, strong and good for pegs, but too small for any other purpose.—*Drs. Wight, Gibson, Flor. Andh., Thwaites En. Pl. Zeyl.*

DIEN-NEEUNG.? In Amherst, a timber used for rice-pounders; it is a close-grained, strong, compact, brown, hard wood.

DILLENIA, a genus of plants, several species of which, yielding useful and valuable timbers, grow in Ceylon, in the two peninsulas, and in the northern provinces of India. Some, of which the timbers are described, are not yet specifically determined.

DILLENIA, *Species.*

Zin Pyun Ngan. BURM.

A tree of Moulmein. A strong wood for any ordinary purposes. Fruit edible.—*Cal. Cat. Ex.* 1862.

DILLENIA, *Species.*

Zim-boon. BURM.

A timber of Tavoy, used in building.—*Captain Dance.*

DILLENIA AUGUSTA, *Roxb.*

Zin-byewn. Burm.

Grows in the Garrow hills, and is plentiful in the forests of the Pegu district, but becomes scarce to the north of it. Its wood is of a light-brown colour, and it yields a large and good timber for house-building.—*Roxb.* ii. 652, *Dr. McClelland, Voigt.*

DILLENIA AUREA, *Sm.*

Zimbyoon. Burm.

Abundant in the plains and hills and in the forests of British Burmah, but more scarce to the north of it. Wood of a light-brown colour occasionally used in house-building, but mostly for firewood. Breaking weight lbs. 198. A cubic foot weighs 48 lbs. In a full-grown tree on good soil the average length of the trunk, to the first branch, is 20 feet, and average girth, measured at 6 feet from the ground, is 9 feet. It sells at 12 annas per cubic foot.—*Dr. Brandis, Cal. Ex. Cat. of* 1862.

DILLENIA DENTATA ? ?

Gode para. Singh.

Grows in the western parts of Ceylon, where its wood is used for roofs of houses. A cubic foot weighs 51 lbs., and it is said to last 40 years.—*Mr. Mendis.*

DILLENIA INTEGRA, *Thunb.*

Wormia integra, H. f. et T., l. c. p. 68, cum syn.

Said to grow in Ceylon, but Mr. Thwaites suspects some error as to four species of the large Dilleniaceous trees growing in Ceylon.—*Thw., p.* 5.

DILLENIA PENTAGYNA, *Roxb., W. & A. prod. p. 5.*

Colbertia coromandeliana, *DC.*
Wormia coromandeliana, *Spreng.*

Bjoo-bon. Burm.
Poon spar tree. Eng.
Kurmul. Mahr.
Kanagdu. ,,
Pinnay maram. Tam.
Rawa-dara. Tel.
Rowadan. ,,
Chinna kalinga. ,, & Can.
Ravudana. ,,

This is a stately forest tree, of great value, being one of those which yield the Poon Spars of commerce. It is common in the Godavery jungles, on the face of the Western Ghats, and in all the forests of the Western Coast. In Coimbatore, it is a tall tree. It is a great tree, and common in the Konkun and Ghat jungles of Bombay, but never found inland. As a tree of British Burmah, it is abundant in the Eng. Forest (the forest of Dipterocarpus grandiflora) where its wood is hard and strong, and used for rice-mills. A cubic foot weighs 69 lbs. In a full-grown tree on good soil the average length of the trunk, to the first branch is 20 feet, and average girth measured at 6 feet from the ground is 6 feet. It is a large timber tree in Assam, where it is used for canoes, its wood there being close-grained. Captain Beddome says it is a very strong, hard wood, abundant on the Indrawatty and in jungles on the left bank of the Godavery, but not known on the right bank. Dr. Cleghorn says "this is believed to be the tree, which furnishes the *Poon* spars, so valuable for shipping, though *Calophyllum inophyllum* has hitherto been so considered." Dr. Wight says, in Coimbatore "the similarity of native names between this and Calophyllum inophyllum leads me to suspect some mistake here. The wood of Dillenia pentagyna is said to be exceedingly strong and very durable even when buried under-ground. Since this paper was written, adds Dr. Wight, I have been informed that this is the tree that furnishes the Poon Spars, and judging from the manner of growth, I feel satisfied that this information is correct. This is a tall, the other, a short stunted tree." "I do not find," says Dr. Gibson, "that the wood is used for any purpose more important than for the loose planks used in the decks of native boats. It is not employed in house purposes. This tree is in great request by the merchants of Bombay, from the wood splitting well. It has seemed advisable to give all recent information regarding a tree, which is supposed to yield a timber so valuable as the Poon Spars. *Roxb.*, ii. 652 —*Drs. Wight, Cleghorn, Gibson, Brandis, Voigt, Captain Beddome, Cal. Cat. Ex. of* 1862, *Useful Plants.*

DILLENIA ORNATA ? Grows in Pegu and Moulmein. The trees are plentiful and of large girth, and furnish a strong good timber, useful for general purposes in house and ship-building. It has large gaudy yellow flowers.—*Dr. Mason, Captain Benson.*

DILLENIA PILOSA, *Roxb.*, ii. 652. Grows in Assam near Goalpara, on the banks of the Megna, and furnishes a hard tough wood, much used for canoes *Roxb.*, ii. 652—*Voigt.*

DILLENIA RETUSA, *Thunb.*

Wormia retusa, *H. f. et T.* | Goda para. Singh.

A moderate-sized tree, growing in Ceylon, to an elevation of 2,000 feet, but not abundant. It yields a "useful wood, used chiefly for building purposes, and more especially as rafters in the roofs of kitchens, where it is found to be the best wood for resisting the effects of smoke and heat."—*Thwaites, Fergusson.*

DILLENIA SCABRELLA, *Roxb.*

Ryow. Burm.
Kulgul. Can.
Kurmul. Mahr.

Grows in Chittagong and in Canara and Sunda, where it is most common below the ghat. Grows large, long, and straight. Wood seems to be used for boat planks in Canara, but it is not reckoned a choice wood in the Bombay Presidency. It is plentiful in the Pegu province, but becomes scarce to the north of it, and it is, there, of large girth, furnishes a large good timber and is useful for general purposes, as house and ship-building. *Roxb.*, ii, 653.—*Voigt*, *Drs. Gibson and McClelland*, *Captain Benson.*

DILLENIA SPECIOSA, *Thunb.; Rheede; W. & A.; W. Ic.*

Dillenia Indica, *Linn.* | Dillenia elliptica, *Thunb.*

Chalita. BENG.
Chalta. ,,
Thab Yew. BURM.
Thab-yoo. ,,
Thee-bew-tha. ,,
Muta Kurmul. DUK.
Girnar. HIND.
Syalita. MALEAL.
Honda-para. SINGH.
Uva maram. TAM.
Pedda Kalinga. TEL.
Kalinga. ,,
Uvva-chettu. ,,

This large and ornamental tree, is hardy and thrives well in compounds. It grows in Ceylon, in the two Indian peninsulas, in Bengal, Assam, Chittagong, and in Java and the Moluccas, and yields a hard, tough wood, good for gun-stocks. It is abundant at Kotah in Ajmeer, and is a native of the valleys in the Circar mountains. Mr. Thwaites says it is common in the warmer parts of the island of Ceylon, up to an elevation of 2,000 feet, and is most frequent on the banks of streams. Captain Beddome says it grows in the jungles of the Godavery, and furnishes a very hard wood. Dr. Brandis mentions that it grows on the banks of the mountain streams of British Burmah, but the wood is not used. A cubic foot he says weighs 41 lbs. In a full-grown tree on good soil the average length of the trunk to the first branch is 15 feet, and average girth measured at 6 feet from the ground is 5 feet. Dr. Brandis is the most recent writer, but, if the same tree, his opinion does not correspond with that of Dr. McClelland who describes it "Thabyew" as scarce in Pegu, but as affording a large and good timber for house-building, and for wood of a light-brown colour. And Captain Dance describes the "Thee-bew-tha" as growing in Amherst, Tavoy and Mergui. Maximum girth 3 cubits, maximum length 22 feet, and the trees abundant, but widely scattered all over the provinces, here and there, inland. When seasoned, it floats in water. It yields a durable, tough, light wood, seeming very good for helves. It is used by Burmese for building houses and for sundry other purposes.—*Roxb.* ii, 650, *Thwaites, Voigt, Drs. Brandis, McClelland, Riddell and Irvine, Captains Beddome and Benson.*

DINDUGA TREE, ANGLO-CAN.

Dinduga. CAN. | Bayla Nava maram. TAM.

According to Dr. Roxburgh, a species of Andersonia. A large and valuable tree of the Wynaad.—*Ains.*

DIOSPYROS. Species of this genus of plants, are found in the Mauritius, Ceylon, and in every part of India, and are remarkable for the woods and fruits they afford. The heart-woods of several species form the ebonies of commerce, are used for ornamental purposes and for engraving and turnery. D. hirsuta, D. oppositifolia, and D. quesita of Ceylon, furnish the Calamander woods, the Kalumœdirya of the Singhalese. The Karens have distinct names for four different species of Tenasserim ebony trees, the salt water swamp ebony, the water ebony, the yellow ebony, and the true ebony. Dr. Mason never met with the trees in flower, so as to be able to distinguish the species of Diospyros; but has seen specimens of the wood in the southern provinces, not inferior to the ebony of commerce. Some of the species of south-eastern Asia, the woods of which have been noticed are, as yet, not described specifically. D. discolor, *Willd.*, is a small tree of the Philippine islands. D. heterophylla, *Wall.*, is a tree of Burmah, D. nigricans of Silhet and D. calycina and grata in the Khassya hills. —*Roxb.*, *Voigt*, *Eng. Cyc.*, *Dr. Mason.*

DIOSPYROS, *Species.*

Kurwul. CAN.

Grows in Canara and Sunda in the great jungles in the Ghats above, chiefly to the south. Ripe wood particularly good, as it has the ebony heart.—*Dr. Gibson.*

DIOSPYROS, *Species.* Muchi twikee, *Tel.*, of the Godavery forests, Warungul. A very hard light-coloured wood.—*Captain Beddome.*

DIOSPYROS, *Species.*

Ouk-khyin-za. BURM.

A beautiful wood of British Burmah, white and black mottled, used for house-posts. A cubic foot weighs lbs. 41. In a full-grown tree on good soil the average length of the trunk to the first branch is 30 feet, and average girth measured at 6 feet from the ground is 9 feet. It sells at 8 annas per cubic foot. —*Dr. Brandis.*

DIOSPYROS, *Species.*

Ghoot. BURM.

In British Burmah, a wood similar to that of the foregoing, but a much smaller tree: small quantities of black heart-wood (Ebony) are occasionally found near the centre of very old trees of this and another kind nearly related to it (Tay-ben.) A cubic foot weighs lbs. 49. In a full-grown tree on good soil the average length is 15 feet, and the average girth measured at 6 feet from the ground is 3 feet.—*Dr. Brandis.*

DIOSPYROS, *Species.* Moulmein ebony. There is an inferior kind of ebony often seen at Moulmein, which the natives do not call by the same name that they do the trees which produce the good ebony, though evidently a product of the same genus. A similar wood at Tavoy is often denominated iron wood.—*Dr. Mason's Tenasserim.*

DIOSPYROS (?) *Species ?* Ryamucha ? Used in house-building at Martaban.

DIOSPYROS, *Species.*

Ebony. Eng.
Tai. Burm.

Maximum girth ½ to 1 cubit, maximum length 8 feet. Found, very scarce, from the forest in the direction of Shuay Gheen. When seasoned it sinks in water. This wood was much sought for, by Captain Dance, but could not be procured in Moulmein in sufficient abundance for it to be made suitable for any ordnance purpose.—*Captain Dance.*

DIOSPYROS ACUTA, *Thwaites.* A middle-sized tree of Pasdoon Corle, in Ceylon. —*Thw. En. Pl. Zeyl.*, *p.* 182.

DIOSPYROS AFFINIS, *Thwaites.* A middle-sized tree growing at Ooma Oya, on the lower road from Kandy to Badulla, in Ceylon. The timber is suitable for building purposes.—*Thw. En. Pl. Zeyl.*, *III*, *p.* 179.

DIOSPYROS ATTENUATA, *Thwaites.* A middle-sized tree of Pasdoon Corle, in Ceylon.—*Thw. En. Pl. Zeyl.*, *p.* 182.

DIOSPYROS CANDOLLEANA, *Wight. Ic. tt.* 1,221, 1,222.—*c. p.* 3,394.

Homedereya-gass. Singh.

In Ceylon, a middle-sized tree, in the Saffragam district and Hinidoon Corle. Mr. Fergusson says that at Galle, the cabinet makers use a timber of this Singhalese name, which is also at Colombo, given to Heritiera littoralis.—*Thw. En. Pl. Zeyl. page* 181, *Fergusson.*

DIOSPYROS CHLOROXYLON, *Roxb.*

Nulla-ulemara wood, Anglo-Tel.
Ullinda. Tel.
Pedda illinda. Tel.
Nalla ulimera. Tel.
Illinda. ,,
Pedda ulimera. ,,

Grows to a large tree on the Circar mountains, and gives a very hard useful wood, whereas, about the Godavery forests, it is generally a shrub. The fruit is edible.—*Roxb.* ii, 538, *Voigt, Captain Beddome.*

DIOSPYROS CORDIFOLIA, *Roxb.*

Diospyros montana, *Wight Icon.*

Bangab. Beng.
Goundhan. Mahr.
Vuckana maram. Tam.
Kaka ulimera. Tel.
Nalla urimida. ,,

Grows in Ceylon near Jaffna, in the peninsula of India, in Coimbatore, in the Bombay forests, and in Bengal. It yields a hard, heavy, strong wood, of a dark-brown colour and difficult to work. Not uncommon in the Bombay side of India, but more in ravines and waste places than in forests. Dr. Gibson had never seen a tree that would turn out a log 4 inches square. The wood is strong and durable.—*Roxb.* ii, 538, *Drs. Wight and Gibson, Thwaites, Voigt.*

DIOSPYROS CRUMENATA, *Thw.*

A tree of the Central Province of Ceylon, growing at an elevation of 2,000 to 4,000 feet.—*Thwaites En. Pl. Zeyl.*, *III.*, *p.* 179. *See* D. QUÆSITA, D. OOCARPA.

DIOSPYROS EBENUM, *Linn.* ; *Retz.* ; *W. Ic.* 188.

D. ebenaster, *Retz.*
D. Hebenaster, *Rumph.*

Abnoos. Ar.
Kurre mara. Can.
Ebony. Eng.
Eβενos. Gr.
Abnoos, the Ebony. Hind.
Tendu, the white wood ,,
Tendua. ,, ,, ,, ,,
Ebenus. Lat.
Abnoos. Pers.
Kal oowara gass. Singh.
Kal woora gass. ,,
Kadu beriya ? ,,
Tai maram. Tam.
Kaka-tati. ,,
Tumbi maram. ,,
Tuki. Tel.
Kendhoo. Uria ?

This great tree, which, in Ceylon, yields the best kind of ebony wood, is not uncommon there up to an elevation of 5,000 feet. It is said to grow in the Denkencottah forest, in the Salem collectorate, and, when writing in 1850, from the Coimbatore collectorate, Dr. Wight says of the Diospyros ebenaster, Ainsl. (*Ebenaceæ*, Icon. 188, Acha maram, *Tam.*) that this name was copied by him from Ainslie, but " that he was still uncertain whether this is the species that yields the ebony of the Palghaut jungles, as there is reason to believe more than one species contributes wood black enough to pass current for ebony. The plant produced to him, under that Tamool name, was Bauhinia tomentosa, a widely different tree, but having a very dark or black heartwood." Dr. Gibson says that the Kuree murra, Abnoos, *Hind.* Diospyros ebenum, is not common in Canara and Sunda though found near Oopenputam in Canara ; also below the Woolwee Ghat. Dr. Cleghorn, writing in the Jury Reports of the M. E. of 1855, says of Diospyros ebenaster, Acha maram, *Tam.* that ebony of very superior quality is procurable in Madras districts as well as in the Northern Circars, and that Mr. Rohde had received 16-inch planks of a fine uniform black. Captain Sankey says that, in Nagpore, this tree, which yields a very fine ebony, has very little of the blackwood, when young : as it advances in age, the blackwood increases, and eventually nothing but blackwood is found. From the ease with which the white wood bends, natives employ it in the manufacture of buggies, carriages, &c. &c., but, as it soon loses its essential oil, the unseasoned timber is preferred for such purposes. White ants attack the white wood readily, and it is nearly always beetle-bored. In strength it excels teak, yet from the above circumstances, as well as from the fact that it is very seldom obtainable of more than 6 inches square, he rejected it as a building material. It grows in the Dekhan and in the Kotah jungles of Ajmeer. Writing, recently, from the Central Provinces, Major Pearson says that he has seen some hundreds of trees cut for sleepers, and never yet saw the black heart of this tree above 10 inches across, however old it may be ; as it gets older, the black heart becomes more full of faults and uneven in growth. Small pieces of gravel often are found in it. Ebony is much affected by the weather, on which account European cabinet-makers seldom use it except in veneer, and its use is restricted to delicate and costly cabinet work. The Atcha maram, which yields one of the ebonies of Madras, is the Bauhinia tomentosa. —*Drs. Gibson, Wight, Cleghorn, Riddell and Irvine, Voigt, Thwaites, Mr. Rohde, Captain Sankey, Tredgold, Holtzappfel, Majors Pearson and Beddome.* See EBONY.

DIOSPYROS EMBRYOPTERIS, *Persoon ; W. Ic.* 843, 844.

Diospyros glutinosa, *Kön., Roxb., Rheede.*
Embryopteris glutinosa, *W. Ic., Rheede.*

Tumika? BENG.
Gaub. BENG. HIND. SANS.
Gab Tree. ENG.
Sindica. ,,
Timberee-gass. SINGH.
Panichi maram? TAM.
Tumbikai. ,,
Tubiki. TEL.
Tinduki ,,
Tumiki. ,,

Grows in Ceylon, in damp forests, towards the South of the island ; also, in peninsular India, in the Circars, at Hurdwar, in the Dehra Dhoon, and all along the foot of the Himalaya, to Sylhet and Assam. Wood of an indifferent quality and not much used. The astringent viscid mucus of the fruit is used for paying boats' bottoms, and, as they contain much tannin, an infusion is used to steep fishing nets.—*Roxb.* ii. 533, *Mr. Rohde's MSS., Thwaites, Voigt.*

DIOSPYROS GARDENERI, *Thw.*

Kadoombaireya-gass. SINGH.

A middle-sized tree of Ceylon, at Saffragam and Kornegalle districts, and less commonly near Kandy. Timber valuable for building purposes, and for cabinet work.—*Thw. En. Pl. Zeyl., p.* 181, *Mr. Fergusson.* See EBONY.

DIOSPYROS HIRSUTA, *Linn. fil.*

Calamander wood tree. ENG.
Calu midiriya. SINGH.
Koul-midvies. SINGH.?
Calamander maram. TAM.

A middle-sized tree of the forests of Ceylon in the Saffragam and Galle districts, which furnishes one of the Calamander woods of commerce. Its density is nearly 60 lbs. to the cubic foot. Tredgold mentions that the figure is between that of rose-wood and zebra-wood ; the colour of the ground is usually of a red hazel-brown, described also as chocolate-brown, with black stripes and marks. It is said to be so hard as almost to require grinding rather than cutting ; but, this is not strictly accurate, as the veneer saws cut it without particular difficulty : it is a very handsome furniture wood and turns well ; Mr. Layard says that there are three varieties of it ;—the Calamander or Coromandel, which is the darkest, and the most commonly seen in England ; the Calemberri, which is lighter coloured and striped, and the Omander, the ground of which is as light as English yew, but of a redder cast, with a few slight veins and marks of darker tints. He says, the wood is scarce and almost or quite limited to Ceylon ; that it grows between the clefts of rocks, this renders it difficult to extract the roots, which are the most beautiful parts of the trees. A cubic foot weighs lbs. 57, and it lasts 80 years : even in Ceylon, Calamander is a scarce though beautiful wood, close-grained, and the most valuable for ornamental purposes in that island. It is exceedingly hard, and finely veined, with different shades of black and brown.—*Ain's. Mat. Med., p.*211, *Th., p.*181, *Tredgold, Holtzappfel; Mr. Faulkner.* See CALAMANDER ; DIOSPYROS QUÆSITA ; D. OOCARPA.

DIOSPYROS INSIGNIS, *Thw.*

Gona-gass. SINGH.

A large tree of the damp forests of Ceylon, growing up to an elevation of 2,000 feet. It is a valuable timber tree.—*Thw. En. Pl. Zeyl., p.* 180, *Fergusson.*

DIOSPYROS KAKI, *Linn.*

Diospyros chinensis, *Bl.*
Embroypteros kaki, *G. Don*

A tree of Nepal, Cochin-China, China and Japan : pulp edible.—*Roxb.* ii. 527, *Voigt.*

DIOSPYROS LANCEÆFOLIA. A scarce tree of Kumaon. Wood heavy, hard, very durable, and yields logs 10 to 12 feet long and 24 inches in girth.—*Mr. R. Thompson.*

DIOSPYROS LANCEOLATA.

Hill ebony. ENG.
Tendú or Tindú. PANJAB.

A Panjab tree. Timber good, but scarce.—*Mr. Powell.*

DIOSPYROS LOTUS, *L.?*

Diospyros tomentosa, *Cleghorn.*

Amlok. PANJAB.
Maluk. ,,
Gwalidar. PANJAB.
Bissahri pala. ,,

This handsome though small tree, grows in the Panjab, in Peshawar and west of the Indus, at heights of 2,500 to 6,000 feet, and is seen up to 12 feet in girth. Its wood is not known.—*Dr. J. L. Stewart, p.* 136.

DIOSPYROS MABOLA, *Roxb.*

Diospyros discolor, *Willd.*
Embryopteris discolor, *G. Don.*
Cavamillea Philippensis, *Desrouss.*

A small tree, native of the Phillippine Islands, wood black, very compact. Often called "Mangosteen," under which name it is cultivated extensively in gardens at Vizagapatam. The fruit, called *Mabola*, is brown, with a pink-coloured, fleshy rind, about the size of a quince; its flavour is said to be agreeable.—*G. Don's Mill. Dict.* 4, *p.* 40.

DIOSPYROS MELANOXYLON, *Roxb.*

Abnoos.	ARAB.	Kakinda.	SANS.
Kendu.	BENG. URIA.	Tumbai maram	TAM.
Kiu.	,,	Tumbali maram.	,,
Ouk-chin-ya.	BURM.	Tumma chettu.	TEL.
Balai?	CAN.	Tumida.	,,
Coromandel Ebony.	ENG.	Tummeda.	,,
Ebony tree.	,,	Tummika.	,,
Godavery ebony.	,,	Tunki chettu.	,,
Tendu.	HIND.	Tuniki chettu.	,,

Grows in Coimbatore, north Canara, in Malabar, in Ganjam, Gumsur and Orissa, is the Toonkee of the Godavery and the Tookee of the Circars, and in Pegu it is found very plentiful throughout the southern forests, seldom however of greater girth than three or four feet. It is a very large tree in Coimbatore, the outer wood being white like that of other species of Diospyros, and the inner black and heavy, forming one of the ebonies of commerce. The white wood, however, is, used for common purposes. In Ganjam and Gumsur, extreme height 60 feet, circumference 4½ feet, height from the ground to the intersection of the first branch, 30 feet. It is tolerably common. The fruit is eaten. Dr. Gibson says that it is found sparingly in the Bombay forests of North Canara, as below the Woolwa Ghat, and near Meerjan inland. It occurs according to Dr. McClelland, plentifully, in the Southern forests of Pegu, from fifteen to eighteen inches in diameter, and fifty to seventy feet in length, and might, he says, afford spars for naval purposes, but Dr. Brandis does not mention this as a Pegu wood. In Ganjam, the wood is hard and blacker than the Sesoowa, and boxes are made of it.—*Roxb.* ii, 530, *Drs. Wight, Gibson, McClelland, p.* 10, *Voigt, Captains Beddome and Macdonald.*

DIOSPYROS MONTANA, *Roxb.*; *W. Ic.*

Teemroo.	MAHR.	Tindu.	PANJ.
Teemboorni.	,,	Erra gadda.	TEL.
Kendu.	PANJ.		

A small tree which, Dr. Stewart states, grows in all the Siwalik hills west to the Ravi river, but Mr. Powell says it is not common in the Panjab. The heart-wood there is fine, black, hard and brittle, and is called ebony; it carves well and insects do not touch it: handsome ornamental boxes are made of it, also combs; and it is used in cabinet carpentry. It is a middle-sized tree of the Circar mountains, grows in the hills eastward from Panwell, extending northwards to Ruenka Lake, near Nahu. The tree is very common in the larger Bombay jungles, both near the coast and elsewhere, and it would be one of the most common of their mountain trees if allowed to grow; but it is generally cut off for burning material, or such like worthless purposes. Wood dark and strong. Fitted for agricultural implements, in-door work, &c. Does not bear exposure, and could not be creosoted. Dr. Roxburgh says it is hard and durable, and is variegated with dark and white coloured veins.—*Roxb.* ii, 538, *Drs. Ainslie, Gibson, and J. L. Stewart, Mr. Powell, Voigt.*

DIOSPYROS MOONII, *Thw.*

A middle-sized Ceylon tree, near Cultura and Pasdoon Corle.—*Thw. En. Pl. Zeyl., p.* 182.

DIOSPYROS OOCARPA, *Thw.*

Kaloo-kadoombaireya-gass. SINGH.

A middle-sized Ceylon tree of the Kornegalle district, and at Haragam, near Kandy, at no great elevation. It furnishes one of the Calamander woods.—*Thw. En. Pl. Zeyl., p.* 180. *See* D. HIRSUTA and D. QUÆSITA.

DIOSPYROS OPPOSITIFOLIA, *Thw.*

Kaloo-midereya-gass. SINGH.

A middle-sized tree of Hinidoon Corle, Ceylon, up to an elevation of 1,000 feet. Its timber nearly resembles Calamander wood.—*Thw. En. Pl. Zeyl., p.* 181.

DIOSPYROS OVALIFOLIA, *Wight Ic. t.* 1,227.

Grows in the peninsula of India, and is a middle-sized Ceylon tree at Jaffna, in the Central Province, at Hewahette and below Hapootelle, at an elevation of 2,000 to 4,000 feet.—*Thw. En. Pl. Zeyl., p.* 181.

DIOSPYROS QUÆSITA, *Thwaites.*

Kaloo-midereya-gass. SINGH.

A great tree of Ceylon, at Singherajah and other forests between Ratnapoora and Galle. This species produces the most valuable of the timber known as Calamander wood, so much esteemed for ornamental cabinet-work. This plant is nearly allied to D. crumenata, but its larger leaves and fruit, and its pentamerous flowers, well distinguish it.—*Thw. En. Pl. Zeyl., III, p.* 180. *See* D. HIRSUTA and D. OOCARPA.

GSL

DIOSPYROS STRICTA, *Roxb.*

A tree of Tipperah.—*Roxb.* ii. 539, *Voigt.*

DIOSPYROS SYLVATICA, *Roxb.*, Pl. Cor., pp. I., 38 to 47.

Soondoo Kadoombaireya-gass. SINGH.
Nulla kaka Mushti. TEL.

A common tree in the peninsula of India, grows also in the Circars and in Ceylon, in the damp forests in the Hantani district and near Ratnapoora, up to an elevation of 4,000 feet. In the Circars, the wood is whitish and very hard.—*Roxb.* ii, 537, *Voigt.*, *Thw.*, *En. Pl. Zeyl.*, *III*, p. 178, *Major Beddome.*

DIOSPYROS TOMENTOSA, *Roxb*; *W. Ic.*

Tumal.	BENG.
Kin.	,,
Tumal.	HIND.
Kinnu.	PANJAB.
Mitha Tendu.	,,
Kendu.	PANJAB.
Tendu.	,,
Kaka tanduka.	SANS.
Chitta tumiki.	TEL.

A tall elegant tree of the northern part of Bengal, extending to the Kheree jungle and into the Siwalik, heart-wood furnishing a hard and heavy black wood, usually called ebony. It carves well, and handsome boxes and combs are made of it; also, in Kangra, ploughs. Its fruit is edible. It occurs abundantly but of small size in the Western forests of Gurhwal and yields ebony, which in the Bijnore district is carved into card cases, work-boxes, quill-holders, cups, platters, and sells at 12 to 20 Rs. the maund.—*Roxb.* ii, 532, *Voigt.*, 343, *Mr. R. Thompson, Dr. J. L. Stewart.*

DIOSPYROS TOPOSIA, *Ham.*

D. racemosa, *Roxb. Fl. Ind.*, *II.*, *p.* 536; *Wight, Ic. t.* 416, *c. p.* 1911.
Embryopteris racemosa, *G. Don.*

Kaha-kaala-gass. SINGH.

A tree of Ceylon; not uncommon in damp forests, up to an elevation of 4,000 feet. Timber used for fancy cabinet work.—*Thw. En. Pl. Zeyl.*, *III*, *p.* 179.

DIPTEROCARPUS, a genus of enormous trees with erect trunks, natives of Eastern and Southern Asia, occurring in Ceylon, in all the Western Ghats of peninsular India, Assam, Tipperah, Burmah, Pegu and Tenasserim. They abound with resinous juices, called wood oils, which dissolve caoutchouc, and have medicinal properties similar to copaiba.—*Eng. Cyc.*

DIPTEROCARPUS, *Species.*

Kaung-mhoo. BURM.

Trees of an immense size in British Burmah, used for canoes. In a full-grown tree on good soil the average length of the trunk to the first branch is 100 feet, and average girth measured at 6 feet from the ground is 12 feet. It sells at 8 annas per cubic foot.—*Dr. Brandis.*

DIPTEROCARPUS, *Species.*

Kyau-thoo. BURM.

A large tree found in the hills of British Burmah, wood used for canoes and cart-wheels. A cubic foot weighs lbs. 43. In a full-grown tree on good soil the average length of the trunk to the first branch is 80 feet, and average girth measured at 6 feet from the ground is 20 feet.—*Dr. Brandis.*

DIPTEROCARPUS, *Species.*

Kan-young. BURM. ?

A tree of Akyab. Used in house-building, and sometimes for posts. This tree grows to a large size, and is not very plentiful.—*Cal. Cat. Ex.* 1862.

DIPTEROCARPUS, *Species.* Sour wood oil tree. This large tree grows on the Karen mountains, but it produces comparatively very little wood oil.—*Dr. Mason.*

DIPTEROCARPUS ALATUS, *Roxb.*

Battee Sal.	BENG.
Ka-Nyin.	BURM.
Aing?	BURM.
Wood oil tree of Burmah.	ENG.

A magnificent forest tree of Pegu and the Mascal islands, rising 250 feet in height. It is found chiefly to grow on laterite in the Tounghoo and Prome districts. Its wood is of a light-brown colour. A cubic foot weighs lbs. 38. In a full-grown tree on good soil the average length of the trunk to the first branch is 100 feet, and average girth measured at 6 feet from the ground is 25 feet. It sells at 4 annas per cubic foot. This timber is excellent for every purpose of house-building, especially for posts. It is useful for planking when not exposed to wet, and is extensively used in the Straits for house-building: when exposed to wet, however, it rapidly decays, and canoes made of it do not last 3 or 4 years. To obtain the wood-oil, an incision in the form of a cup is cut into the lower part of the trunk of the tree, which, acting as a natural reservoir, collects the oil as it descends.—*Roxb.* ii, 614. *Drs. McClelland, Brandis, Voigt, Captain Benson.*

DIPTEROCARPUS ANGUSTIFOLIUS, *W. & A.*

Dipterocarpus costatus, *Roxb.* | Tilia garjan. RAKH.

A large tree of Chittagong, furnishing a wood oil in the largest quantity.—*Roxb.* ii, 613, *Voigt.*

DIPTEROCARPUS GLANDULOSUS, *Thw.*

Dorana. SINGH.

CSL

A large Ceylon tree, in the Saffragam and Ambagamowa districts, at no great elevation.—*Thwaites.*

DIPTEROCARPUS GRANDIFLORA, *Wall.*

Eng. Burm.
Ain? ,,
Ain tha. Burm.

Large flowered Dipterocarpus. Eng.

An immense tree of Burmah and Pegu, which grows on the sandy plains near the sea-shore, and on a similar soil in the interior. This tree, in company with a few other kinds, forms extensive forests which cover upwards of 2,000 square miles in the province of Pegu. The wood is somewhat more durable than that of "Kanyin" D. alatus, and is used for canoes, house-posts, planking, &c. A cubic foot weighs 55 lbs. In a full-grown tree on good soil the average length of the trunk to the first branch is 60 feet, and average girth measured at 6 feet from the ground is 10 feet. It sells at 8 annas per cubic foot. It grows also in Tavoy.—*Drs. Brandis and Mason, Col. Frith.*

DIPTEROCARPUS GRANDIS?

Tng-tha. Burm.

A tree of Moulmein, the wood of which is converted into planks for building—*Cal. Cat. Ex.* 1862.

DIPTEROCARPUS HISPIDUS, *Thw.*

Boohora-gass. Singh.

An immense tree of Ceylon, growing in the Saffragam district, at no great elevation.—*Thwaites.*

DIPTEROCARPUS INCANUS, *Roxb.* ii, 614.

A tree of Chittagong, wood not known.

DIPTEROCARPUS INSIGNIS, *Thw.*

An immense tree of the Saffragam district, in Ceylon.—*Thwaites.*

DIPTEROCARPUS LÆVIS, *Buch.*

Dipterocarpus turbinatus, *Roxb.*

Tilea gurjun. Beng.
Ka nyeen tha? Burm.

Wood oil tree. Eng.
Horre. Singh?

This majestic tree grows to a height of 250 feet. It is met with in Assam, Tipperah, Chittagong, Burmah? and Pegu? Found very abundant all over the provinces of Amherst, Tavoy and Mergui, where its wood is used similarly to D. alatus. Dr. Mason says it is a very useful timber, which is sawn into boards at Tavoy and Mergui, and used in house-building. Where not exposed to the wet, they answer as well as teak, and are sold at half the price; they are, however, not impervious to white ants. But Captain Dance, who tells us that it is used for rafters and planks, adds that it is an inferior wood, by no means durable as it rots as soon as it is exposed to water and shrinks readily. He says that Dr. McClelland speaks of this wood more favourably, but thinks he must mean some other wood, as this is decidedly bad, very porous, and, when kept, the oil oozes out and stands in globules over it, it warps to a great extent, and though used for cases does not last for more than about two years.—(Vide No. 81, page 135 of Dr. McClelland's Report, where this tree is described as Dipterocarpus turbinatus.) Maximum girth 6 cubits, maximum length 70 feet. When seasoned, floats in water.—*Roxb.* ii, 612, *Dr. Mason, Voigt, Captains Dance and Benson.*

DIPTEROCARPUS OBLONGIFOLIUS, *Thw.* A great tree near Ratnapoora, in Ceylon.—*Thwaites.*

DIPTEROCARPUS SCABRIDUS, *Thw.*

A great tree near Ratnapoora, in Ceylon.—*Thwaites.*

DIPTEROCARPUS ZEYLANICUS, *Thw.*

Hora-gass. Singh.

A great tree, in Ceylon, abundant up to an elevation of 3,000 feet; the trunk being 50 to 60 feet long and 3 to 4 feet in diameter. A cubic foot weighs 45 lbs., and its timber, which is used for the roofs of common buildings, lasts 15 years. It is however one of the most common and one of the most despised woods of Ceylon.—*Thwaites, Messrs. Mendis and Fergusson.*

DIVE PARRE, Singh. A wood of the western province of Ceylon, used in common house-buildings. A cubic foot weighs 44 lbs., and the timber lasts 20 years.—*Mr. Mendis.*

DODDA GODDA, Can.? A wood of Mysore.

DODONÆA BURMANNIANA, *D C.*

Switch sorrel. Eng.
Mirandu of Kangra.
Ghuraskai Pashtu.
Wuraska ,,

Sanatta, Rawulpindi and Salt Range.
Santea, ,,
Alyar, ,,
Æta wœrala. Singh.

Grows all over India from the N. W. Himalaya to Ceylon. Grows abundantly in the lower Siwalik hills, and in the plains of the Panjab: when cultivated, it is a good hedge-plant. The wood is very tough and hard, of a white colour, and is used for carving and handles of tools. There is another species of Dodonœa with broad leaves, growing in the Badámi Bágh of Lahore.—*Messrs. Powell and Fergusson.*

DODONÆA ORIENTALIS. Hop-wood of Norfolk Island, does not attain to more than a foot in diameter, and is principally used for veneering and in turning ornaments. —*Keppel's Ind. Arch., Vol., II, p.* 282.

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DODUGA, Tel.? A wood of the Northern Circars.

DOHEE, Hind.? A tree of Chota Nagpore, with a soft, white wood.—*Cal. Cat. Ex.* 1862.

DOKA, Hind.? A tree of Chota Nagpore, with a hard red timber.—*Cal. Cat. Ex.* 1862.

DOONA, *Thwaites.*

A genus of large trees of Ceylon, D. affinis occurs between Ratnapoora and Galle, at no great elevation. D. congestiflora, "Tinneya gass, *Singh.*, at Hinidoon and Pasdoon Corles; D. cordifolia, at no great elevation at Pasdoon Corle and Ambagamowa: D. Gardneri, in the central province at an elevation of from 3,000 to 5,000 feet. D. nervosa at Eknalagodde near Ratnapoora. The characters of these woods are not known.—*Thwaites, En. Pl. Zeyl.*

DOONA TRAPEZIFOLIA, *Thwaites.*

Tuccahaaloo-gass. Singh.

Grows as a common forest tree, in the central and southern parts of the island of Ceylon up to an elevation of 1,500 feet. Wood not known.—*Thw., p.* 55.

DOONA ZEYLANICA, *Thwaites.*

Doon-gass. Singh.

Grows in the central province of Ceylon, up to an elevation of 4,000 feet. Wood easily splits, used for shingles. There exudes from the trunk and branches of this fine tree, a large quantity of colourless gum, which, when dissolved in spirits of wine or turpentine, makes an excellent varnish.—*Thw., p.* 34, *Fergusson, Mr. Mendis.*

DOOR. A Panjab wood, light, soft and white; yields all necessary timber for building purposes; but is liable to warp, and decays fast if exposed to water.—*Lieut.-Col. Lake, Commr., Jhullundur Division.*

DOR-KHAIR, Hind.? A tree of Chota Nagpore, with hard, yellowish red timber.—*Cal. Cat. Ex.* 1862.

DOW YAT, Burm. Maximum girth 3 cubits. Maximum length 18 feet. Found abundant, but, always inland, all over the country, at Amherst, Tavoy and Mergui. When seasoned, floats in water. A soft bad wood, useless except for elephant bells.

DRUM? A Penang wood, light-brown colour, used for ornamental furniture. A very small tree.

DUABANGA GRANDIFLORA, *Wall.*

Myouk-gnau. Burm.

A wood of British Burmah, used in housebuilding. A cubic foot weighs lbs. 30. In a full-grown tree on good soil the average length of the trunk to the first branch is 80 feet, and average girth measured at 6 feet from the ground is 12 feet. It sells at 8 annas per cubic foot.—*Dr. Brandis, Cal. Cat. Ex.* 1862.

DUDHHI, Hind.? A tree of Chota Nagpore with a soft white timber.—*Cal. Cat. Ex.* 1862.

DULCHIRRAM, Tel. Acacia kalkora. On the Godavery an enormous tree. Wood hard and reddish.

DUNORHUNG. A Penang wood, of a brown colour, specific gravity 1·235. Used by the Chinese for carving images.

DUP-MARAM, Maleal.? Tam. According to Edye, a tree of Malabar and Canara, also named Nade-mara, and to be found in the forests of the coast from north to south. It grows from sixty to eighty feet high, and from two to three feet in diameter. It is a light sort of wood, similar to the white American fir of New England. This is the tree which produces the best description of country damar—(damar is a resin used as a substitute for pitch for the seams of ships after caulking, &c. It is prepared with oils, but it is not so valuable as the damar from the island of Sumatra.) The natives use the large trees as rafters, and as catamarans, and for housebuilding, and the small spars to make sheds and yards for the native vessels. So long as the moisture of the wood remains, it may be considered to answer these purposes; but, when it becomes dry, it is very brittle and of no use. At Cochin, he found the rafters and uprights of the roofs over the ships of war at that port of this wood, with the purlings of split bamboo over them, and cadjans (cocoanut leaves platted), all of which were lashed together by coir yarns. The amount of expense for a roof with sheds was about 350 Rupees, or 44*l.* sterling.—*Edye, Timber of Malabar.* (*Note.*—Edye here undoubtedly describes the *Vateria Indica ?*)

DURIA MADDEE, also kora maddee and koramaa, *Tel.*, Briedelia spinosa. On the Godavery, wood appears to be very strong and good. Cattle eat the leaves most voraciously.—*Captain Beddome.*

DYSOXYLON CHAMPIONII. A great tree of the Central Province of Ceylon, found up to an elevation of 4,000 feet.—*Thw. En. Pl. Zeyl., p.* 61.

DYSOXYLON MACROCARPUM, *Blume.*

Guarea binectarifera, *Roxb. Cat.*
Amoora lictiformis, *Wight Illust., I,* 147.

A great tree of Ceylon, found in the Central Province, up to an elevation of 3,000 feet, and at Batticaloa.—*Thw. En. Pl. Zeyl., I., p.* 60.

E

EAGLE WOOD.

Agalughen.	Ar.
Ugoor.	Beng.
Ag'r.	Duk. ,,
Agel-hout.	Dut.
Lign aloes.	Eng.
Aloes wood.	,,
Eagle wood.	,,
Incense wood.	,,
Agalocha.	,,
Black agalocha.	,,
Bois d' aigle.	Fr.
Agallochee.	Gr. ?
Agallochum	,, of Dioscorides.
Ahel.	Heb.
Ahelim.	,,
Ahiloth.	,,
Ud-i- Chini.	Hind. Pers.
,, Hindi.	,, ,,
,, Kimari.	,, ,,
,, Bukhoor.	,, ,,
Ud-i Samudri.	Hind. Pers.
Aggur.	,, ,,
Kalambak.	Jav.
Agallochum.	Lat.
Al-camericum.	,,
Lignum aloes.	,,
Xylo-aloe.	,,
Tarum of Pliny.	,,
Agila gahru.	Malay.
Garu.	,,
Kayu gahru.	,,
Pao d' agila.	Port.
Pao d' aguila.	,,
Pao d' aquila.	,,
Agara.	Sans.
Agarhu.	,,
Kisna Agaru.	Siam.
Agaru.	Tam.
Krishna agaru.	Tel.
Haud and Ud of Garcias.	

A highly fragrant wood, much esteemed by Asiatics for burning as incense. There are several kinds in commerce, and supposed to be obtained from the Aloexylon agallochum, *Lour.*, Aquillaria agallocha, *Roxb.*, the Aq. Malaccensis, *Lam.*, and the Aquilaria secundaria. The Eagle wood seems to be a resinous deposit in the interior of the tree. A good specimen of it is in the Government Central Museum, Madras. It is mentioned in *Num.* xxiv, 6 ; *Pro.* vii, 17 ; *Cant.* iv, 14.—*Drs. O'Shaughnessy and Roxburgh, Eng. Cyc., Voigt.*

EBONY.

Kendu.	Beng.
Yendike.	Burm.
Tai.	,,
Ebben-hout.	Dut.
Ebene.	Fr.
Ebenholz.	Ger.
Abnus.	Guz. Hind. Mahr. Pers. Uria.
Hobnem.	Heb.
Tendua.	Hind. Mahr. Uria.
Ebeno.	It.
Kaya-arang.	Jav. Malay.
Ebenus.	Lat.
Ebenowoederewo.	Rus.
Kalu vere.	Singh.
Kaka tatee.	Tam.
Atcha maram.	,,
Atcha manu.	Tel.
Tookee.	,,
Nalla toomi karra.	,,
Toombi kara.	,,
Toomi-chava karra.	,,
Toombika.	,,

A black wood, exceedingly hard, and heavy, of great durability and susceptible of a high polish. It is exported from Upper Egypt, Abyssinia, Zanzibar, Madagascar, Mauritius, Ceylon, India, and Jamaica. The ebonies of South Eastern Asia, are obtained from several species of Diospyros, Dalbergia, and Bauhinia, from trees growing in the Mauritius, Ceylon, in several parts of the Peninsula of India, in Coimbatore, Malabar, Canara, the Dokhan, in the Circars, Ganjam, Cuttack and Gumsur, also in Assam, the Malay peninsula, in Penang, Siam, and eastwards through the Asiatic Archipelago to the Philippine Islands. The true ebony is so deep a black as to be used to personify blackness. But, woods sold under this name have also reddish, greenish or yellowish hues, and are distinguished in commerce as red, green and yellow ebonies, though these are in much less esteem than the ebonies which are jet black, free from veins, and close-grained. The jet black kinds are solely employed for ornamental furniture, cabinet-engraving and turnery work, rulers, and for handles for doors, knives, pianoforte keys, philosophical, musical and surgical instruments, mosaic work and inlaying, though cheaper woods, dyed black, are frequently substituted : but it is much affected by the weather, on which account it is seldom used in the plank solid. It is first mentioned in Ezekiel xxvii, 15 : but in the plural, when the men of Dedan are described as bringing horns of ivory and ebony. Herodotus (iii, 97) mentions ebony as part of the presents brought in considerable quantities to the king of Persia by the people of Ethiopia, and Dioscorides describes two kinds, one Ethiopian which was considered the best and the other Indian which was intermixed with whitish stripes and spotted. But there are ebonies in the Mauritius, Ceylon and the south and east of Asia, equal to those of any other part of the world. The ebony in the south of the peninsula of India, is chiefly obtained from Coorg and Canara, from various species of Diospyros and is of a superior description, being perfectly black in colour. Smaller species are procured from Cuddapah, Salem, Nuggur, &c., but there is no steady demand, though, for ornamental cabinet-work, it is peculiarly fine veined. That of Ceylon, from the Diospyros ebenum, is of great value. And another heart wood, that of the Kadoem beriye or Bastard ebony of western Ceylon, also from species of Diospyros, is occasionally met with of extraordinary beauty. The ebonies of the Palghat and Coimbatore districts, are supposed to be from species of Diosypros and Bauhinia. In none of the trees, is the entire bole black, only the heart wood, the outer and white wood being the Tendua of the Mahrattas. The ebony tree of the Malabar forests, Diospyros melanoxylon, is also found sparingly in those of N. Canara below the Woolwa Ghat and near Meerjan inland. It is procurable, of a very superior quality, in the hill Zemindaries of the Northern Circars, particularly in the Ganjam district : also, inland from Ellora in the Masulipatam District, logs of Diospyros ebenaster yield an ebony richly variegated with bright brown stripes and mottled, similar in appearance to Calamander wood, which, also, is from three species of Diospyros. The Karens have distinctive names for four different species of Tenasserim ebony trees

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—the salt water swamp ebony, the water ebony, the yellow ebony, and the true ebony. Dr. Mason never met with the trees in flower, so as to be able to distinguish the species of Diospyros to which they belong but had seen specimens of the wood in the southern provinces, not inferior to the ebony of commerce. Also, under the Burmese name of "yendaik," the wood of two different trees is sometimes seen,—one, a species of ebony, and the other a leguminous tree which, according to the descriptions of the Karens, is a species of dalbergia, and the wood resembles the blackwood of Hindustan. There is an inferior kind of ebony often seen at Moulmein, which the natives do not call by the same name that they do the trees which produce the good ebony, though evidently a product of the same genus. It also (Moulmein ebony) is from a species of *Diospyros*. A similar wood at Tavoy is often denominated "iron wood." The Burmese ebony, known as "Tai" is found in the direction of Shooay Geen, but is very scarce. Ebony sells in England at £5 to £10 a ton.—*Drs. Gibson, Wight and Mason, Tredgold, Holtzappfel, Faulkner, Crawfurd, Thwaites, Voigt, Captain Dance, Mr. Rohde, Eng. Cyc.*

EDANAII. The Tamil name of a Malabar tree that grows to about forty feet in height, and two feet and a half in diameter. It is very soft, and not durable : it produces a sort of gum, or resin, like the Payani. The wood is used for catamarans, rafts for heavy timber, canoes, spars for sheds, and other purposes.—*Edye, Forests of Malabar and Canara.*

EDDELLAH. The Malayala name of a Malabar tree which grows to about thirty feet high, and twelve inches in diameter. It is used in boats and country vessels ; and is designated jungle wood. In consequence of its scarcity it is not much known or used.—*Edye, Forests of Malabar and Canara.*

EDWARDSIA MICROPHYLLA and **E. GRANDIFLORA**, are both known as the New-Zealand laburnum, and by the native names kowhie or kongia, they grow 30 or 35 feet high, flowering from September to December with pendulous clusters of yellow blossoms. Their woods are hard, and durable, and are principally used by the New-Zealanders for paddles and implements.—*Bennett's Gatherings, p.* 409.

EHRETIA ASPERA.

Chamror, Hind.
Puna of Rawalpindi, Kaghan, &c.
Khubara, Panjab.
Lor, Pashtu.
Laggar, Baddi Kander of Salt Range.

A tree of the Panjab, not uncommon to Trans-Indus, yields a good but small timber.—*Powell.*

EHRETIA LÆVIS, *Roxb.*

Beurreria lævis, *G. Don.*

Maha-tambala. Singh.
Pal-dantam, Godavery Tel.
Pedapulmera, Circar Tel.
Seregada ,,

A pretty large tree, common, though small, in the drier parts of Ceylon, grows in the peninsula of India, is a native of the Circar mountains, grows in Hindustan, Kumaon, in the Dehra Doon, the Kheree pass and in Bengal. It furnishes a hard valuable wood, though not of great size, which, in the Circars, is used by the hill people for many purposes, and carvers and turners might find it useful.—*Dr. Ainslie, Voigt, Thwaites, Dr. Cleghorn, Captain Beddome, Roxb. I.* 597, *Mr. R. Thompson, Mr. Fergusson.*

EHRETIA OVALIFOLIA, *Wight's Ic.* 1383.

Gundun. Mahr.
Naraga maram. Tam.

In the Coimbatore district, a common but generally small tree and found about towns on the Bombay side, never in forests. The wood is said to be of no account.—*Drs. Wight, and Gibson.*

EHRETIA SERRATA, *Roxb.*

Ehretia pyrifolia, *D. Don.*

Kala aja. Beng.
Nulshima. Nep.
Sum of Panjab.
Punra of Panjab.
Punna of ,,
Kalthaun of ,,

A small tree growing in Bengal, Chittagong, the Khassia mountains, Kumaon, the Panjab, Nepal, Bhootan, and the Dehra Dhoon. It also grows on the Western Siwalik hills, up to 5,000 feet. It furnishes a tough light wood easily worked and durable. It is made into sword handles. Its timber, in the Western Siwaliks, is strong and durable and used for house-building and implements.—*Voigt, Roxb.* i, 596, *Dr. J. L. Stewart, Mr. R. Thompson.*

EIN WIN. Burm. A tree of Moulmein. Used for all ordinary purposes of building.—*Cal. Cat. Ex.* 1862.

ELÆAGNUS CONFERTA.

—Gehai, gawai, or rul of Sutlej valley.
Rinsot of Kanawar.
Sanjata, Pashtu.
Kalkoli or kankol of Kaghan.
Surja of the Panjab.
Sanjad ,,

In the Panjab, a tree, wood small, and somewhat resembling that of Cratægus in qualities. The fruit is edible, and called "Sanjad."—*Powell.*

ELÆOCARPUS, *Species.*

Pooschandia. Uria.

A tree of Ganjam and Gumsur, of extreme height 48 feet, circumference 5 feet, and height from the ground to the intersection of the first branch 9 feet. Ploughshares are occasionally made of this wood, but it is chiefly used for firewood. The rosaries worn by the Byragi and Vaishnava are made of the seeds of this tree.—*Captain Macdonald.*

ELÆOCARPUS, *Species.*

Mha-ghai. Burm ?

A moderate sized tree of Akyab, plentiful in Ramree and Cheduba ; wood used for knife handles, rules, &c., and the fruit and leaves are used by the natives for food.—*Cal. Cat. Ex.* 1862.

ELÆOCARPUS, *Species.* A very large timber tree of Martaban, used for masts and house posts.

ELÆOCARPUS, *Species.* A valuable hard timber tree, very abundant in the neighbourhood of Rangoon, and not uncommon in some parts of the Tenasserim Provinces. Carts are sometimes constructed of it, and it is used in house and boat building.—*Dr. Mason's Tenasserim.*

ELÆOCARPUS, *Species.* Sal-wen, *Burm.* The river Salwen derives its name from a tree of that name that grows on its banks. From the character of the genus, it would probably yield useful wood.—*Dr. Mason's Tenasserim.*

ELÆOCARPUS AMŒNUS, *Thw.* A middle sized tree of the central province of Ceylon, grows up to an elevation of 4,000 feet.—*Thw. En. Pl. Zeyl. p.* 32.

ELÆOCARPUS GANITRUS, *Roxb.*

Ganitrus sphæricus, *Gaertn.*

Rudrakaya. Duk. ?
Utrasum Bead tree. Ang. Tel.
Rudrakaya. Tam.
Rudra challu. Tel.

A tree of Java and the western coast of India. The seeds are used for necklaces, rosaries, &c.

ELÆOCARPUS HINAU, The "Hinau" tree of New-Zealand, yields a heavy hard timber, but not very durable. It grows to a height of 30 feet, and is 8 or 9 feet in circumference. Its bark yields a yellow dye.—*Bennett's Gatherings.*

ELÆOCARPUS LANCEÆFOLIUS. *Roxb.*

Ootradi ke munke. Duk. | Utrasum? Tam.

A tree of the Khassya hills, Assam, Moulmein and Java. The seeds are used similarly to those of the Ganitrus sphæricus, Royle. —*Drs. Royle, Ainslie, Mason and Voigt.*

ELÆOCARPUS LONGIFOLIUS, *Bl.* A tree growing on the banks of the Salwen, and in Java.—*Voigt.*

ELÆOCARPUS LUCIDUS, *Roxb.* A tree of Chittagong.—*Voigt.*

ELÆOCARPUS MONTANUS, *Thw.* A middle sized tree of Ceylon.

ELÆOCARPUS OBOVATUS, *Ain.*

E. coriaceus, *Hook.*

This tree grows at Newera Ellia and other elevated parts of the island of Ceylon, at heights of from 6,000 to 8,000 feet.—*Thwaites.*

ELÆOCARPUS OBLONGUS, *Gærtn.*

Kassow. Duk.

A handsome Dekhan tree.—*Dr. Riddell.*

ELÆOCARPUS SERRATUS, *Linn.*

Grows in the warmer parts of Ceylon, up to an elevation of 2,000 feet.—*Thwaites.*

ELÆOCARPUS TUBERCULATUS, *Roxb.*

Rudrachai. Tam.
Badrachai. ,,
Rudracha. Tel.
Badracha. ,,

A tree of the Travancore forests. The seeds are used by Vaishnava bramins as rosaries.—*Mr. Rohde's MSS.*

ELÆODENDRON DICHOTOMUM ?

Chirndu or darindhu of Panjab.

A small tree of Jhullandur ; wood white, soft and brittle ; used for fuel and the small wood-work in zemindars' houses.—*Lt. Col. Lake.*

ELÆODENDRON GLAUCUM, Pers.

Schrebera albens, *Retz.*
Mangifera glauca, *Rottl.*
Senacia glauca, *Lam.*
Ceylon tea tree, Eng.

This tree is a native of Ceylon, with small green flowers.—*Voigt, Pers.* i. 638.

ELÆODENDRON INTEGRIFOLIA.

Jouk-bin. Burm.

This is a very plentiful, strong, fine timber, found throughout the forests of the Tounghoo and Pegu districts, as well as about Rangoon. It is adapted for fancy work and cabinet making.—*Dr. McClelland.*

ELÆODENDRON PANICULATUM,

"Jumrassee" Hind.

Generally a small tree with elliptical or ovate serrated leaves, common to the hills of the northern part of the Central Provinces. Yields a beautiful white wood, which works very smooth, but is very liable to split and warp : botanically recognized by Dr. Brandis. —*Major Pearson, C. P.*

ELÆODENDRON ROXBURGHII, *W. and A.*

Elæodendron glaucum. *Wall.*
Nerija dichotoma. *Roxb.*
Rhamnus nerija. *Spreng.*

Boot-kus. Mahr.
Selupa maram. Tam.
Bira. Tel.
Nerasi. ,,
Nirija. Tel.
Padriom of Panjab.
Mirandu ,,
Jamoa ,,

This small tree is a native of the mountainous parts of India. It is not uncommon in the eastern part of the Siwalik tract up to the Ravi, rare in the lower hills west of the Jumna, but its timber is not valued, being there white, soft and brittle, though used for small wood-work. Dr. White says that in Coimbatore, this tree is more remarkable for its fine form than for the length and thickness of its bole, and the wood, if good, can only be fit for cabinet making and small sized objects. Dr. Gibson says this tree is more common in the inland than in the coast forests of Bombay, but he had never seen it of a size fit for timber. The wood, however, he says, is strong and compact.—*Drs. Wight, Gibson, and Stewart.*

ELAVUM. The Tamil name of the wild cotton tree of Malabar, which grows to sixty or eighty feet high, and from four to six feet in diameter. It is a very soft, light wood, and used by the natives for catamarans and canoes; and also for rafting the heavy timber from the forests: it is not durable or of much value.—*Edye, Forests of Malabar and Canara.* (*Note.*—This seems the Eriodendron anfractuosum.)

ELATE SYLVESTRIS, *Linn.*

Phœnix sylvestris, *Roxb.*

Wild date tree.

Eajata. CAN.
Sendi ka jhar. DUK.
Itcham maram. TAM.
Ita chettu. TEL.

The leaf.

Itcham elle. TAM.
Ita-aku. TEL.

Its fruit.

Sandulay ka phal. DUK.
Parushaka. SANS.
Itcham pallam. TAM.
Ita pandu. TEL.

Has the general characteristics of the family, but is inferior to the palmyrah, cocoanut, &c. In India, the fruit, when ripe, is small, oval shaped, dark coloured, and sweetish; but, though it is now believed that this tree is identical with the date palm of Arabia, the fruit is not esteemed, being unimproved by cultivation. The leaves and stalks are made into baskets, boxes and hats, the leaves are twisted into rope, and used for thatching and in the manufacture of light mats for building huts. The inner wood furnishes, by boiling, a kind of catechu, which contains much tannin. *Ains. pp.* 153, 224, *Simmonds.*

ELLAHNEEL. TAM? In Travancore, a small tree, with a light red coloured wood, specific gravity 0·779, used for temples, pagodas, and furniture.—*Frith.*

ELLANDE. The Malayala name of a Malabar tree which the natives use for general purposes. It produces a fruit from which they extract a sweet scented oil, which is used medicinally; and also for the hair of the women in days of ceremony.—*Edye, Forests of Malabar and Canara.* (*Note.*—Is this the Zizyphus jujuba.)

ELOOPAY, TAM. in Tinnevelly, a wood of a red colour, used for building in general.

ELUPE MARAM. The Malayala name of a Malabar tree, which grows to fifty feet in height, and two and half feet in diameter. It is said to be a useful timber, and is found to be durable in native vessels for planks, beams, &c. It produces a fruit from which an oil is extracted, which is used for lamps and other purposes.—*Edye, Forests of Malabar and Canara.* (*Note.*—This evidently is the Bassia longifolia.)

EMBLICA OFFICINALIS, *Gærtn.*

Phyllanthus emblica, *Linn. Roxb. W. Ic. Rheede.*
Myrobalanus emblica, *Bauhin.*

Aonla, BENG.
Anola ,,
Nelli mara. CAN.
Nilika-mara. ,,
Emblic myrobalan. ENG.
Μυραβαλανος εμβλικα. GREEK.
Amliki. HIND.
Amlika. ,,
Aruli. ,,
Aungra. ,,
Aonla. ,,
Anola. HIND.
Malaca. MALAY.
Kadondong. ,,
Nelli. MALEAL.
Amlaki. SANS.
Umriti. ,,
Amalaca ,,
Amusada nelli. SINGH.
Nellikai TAM.
Nelli maram. ,,
Usirika manu. TEL.
Amla kamu. ,,

A crooked tree, almost the thickness of a man's body. It grows in all the Peninsula, in Canara, the southern Mahrātta country, the Konkan, the Dekhan, in the forests of the Godavery and Circars, in Bengal, on the banks of the Jumna, Kumaon, the Panjab and eastwards in the Moluccas. The brown wood of this tree is valuable, hard and durable, is used for boxes, and for veneering; is good for well-rings, does not decay under water and is well adapted for turning. The strongly astringent bark is used as a tanning material, and in dysentery and diarrhœa. The Myrobalan fruit, can be pickled or preserved in sugar.—*Roxb.* iii, 671, *Voigt, Captain Beddome, Mr. Rohde, Dr. Cleghorn, Mr. Powell, Mr. Thompson.*

EMBRYOPTERIS GLUTINIFERA, *Roxb.*

Diospyros glutinosa. *Koen.* | D.embryopteris. *Pers.*

Gab. BENG.
Kusharta mara. CAN.
Cusharatha mara. ,,
Wild mangosteen. ENG.
Gab. HIND.
Pani-jika. MALEAL.
Timberri. SINGH.
Tumbika. TAM.
Pani-chika. ,,
Tumei. TEL.
Tumika. ,,

This tree grows in Silhet, Assam, Hurdwar, Dehra Dhoon, Bengal and the peninsula of India. In the northern province of Ceylon, its timber is used for common house-buildings, and the juice of the fruit is used to rub over fishing lines for the purpose of hardening and preserving them, also for paying the bottoms of boats. A cubic foot weighs 45 lbs. and it is esteemed to last 20 years.—*Mr. Mendis, Dr. Cleghorn, Roxb.* ii, 533.

ENG. BURM. In Amherst, a wood used for boat-building, and produces oil. It is a strong, heavy, useful, grey-wood, suited for beams, piles, and the like. (*Note.*—Is it Dipterocarpus grandiflora.)

ENG-BENG. BURM. In Tavoy, a strong wood; used for common carpentry.

ENG-GYENG. BURM. In Amherst, a timber used for posts of religious buildings. A useful wood, but liable to split. (*Note.*—Is it a Shorea ?)

ERAMBOO. TAM.? A Travancore wood of a dark brown-colour used for common houses.—*Col. Frith.*

ERINOCARPUS NIMMONII.

Jungle Bendy. ANGLO-TAM.

A middle sized tree.—*Mr. Jaffrey.*

ERIOBOTRYA JAPONICA, *Lindley.*

Mespilus Japonicus, *Thunb.*

Young-mai. CHIN.
Yang ma. ,,
Loquat. VERNAC.
Lukat. ,,

This small tree of Japan and China, is now cultivated in many parts of India, and bears fruit twice in the year. It is highly esteemed both for desert and preserves. It also grows in great perfection in New South Wales, and the Mauritius. The finest fruit is produced at the second crop, at the end of the cold season, and requires protection day and night ; from birds in the former, and flying foxes in the latter. The fruit has a yellow colour, with thin skin, a sweet acid pulp, one or two seeds in the centre—sometimes more. The seeds grow easily, and it appears to be capable of great improvement. In Ajmere, it is cultivated in gardens but does not thrive well. It is very common in China and is often mentioned by Fortune, who found it growing along with peaches, plums, oranges, the Chinese gooseberry (*Averrhoa carambola,*) the wanghee (*Cookia punctata,*) and the longan and leechee.—*Tea Districts, page* 7, 30, *Drs. Riddell, Irvine, Med. Top. p.* 195, *Voigt.*

ERIOLÆNA, *Species.*

Daw-nee, BURMESE.

This tree is not uncommon in British Burmah but is not very large : wood of a beautiful brick red color, tough and elastic, used for gun stocks, paddles and rice pounders, and is well worth attention, the weight being moderate, a cubic foot weighing lbs. 47. In a full grown tree on good soil the average length of the trunk to the first branch is 50 feet and average girth measured at 6 feet from the ground is 7 feet. It sells at 12 annas per cubic foot.—*Dr. Brandis.*

ERIOLÆNA, *Species.*

Chlo sini, BURM.

A tree of British Burmah. A red light wood, used like Daw-nee, Eriolæna *sp.*, for gun stocks, paddles, and rice pounders, sells at 12 annas per cubic foot.—*Dr. Brandis, Cal. Cat. Ex.*

ERIOLÆNA CANDOLLII, *Wall.* A tree of the Prome mountains. *Voigt.*

ERIOLÆNA HOOKERIANA. *W. & A.*

Nara Botku. TEL.

A strong hard Godavery wood—something like the Botku, a new species of Cordia—*Capt. Beddome.*

ERIOLÆNA TILIIFOLIA.

Let pan, BURM.

Grows plentifully throughout the Pegu and Toungboo districts, attaining a height of fifty feet, with a girth sometimes of seven or eight feet, but usually about six feet. It is a strong tough timber, similar in its properties to Kydia. Wood white-colored, adapted to every purpose of house-building—*McClelland.*

ERIODENDRON ANFRACTUOSUM, *D. C. W. & A. W. Ic.*

E. orientale. *Stend.*
Bombax pentandrum. *Linn. Rheede. Roxb.* iii, 165.
Gossampinus Rumphii. *Sch. & End.*
Ceiba pentandra. *Gærtn.*

Shwet Shimool. BENG.
White Cotton tree. ENG.
Hattian. HIND.
Kattan. ,,
Safed Simal. ,,
Shamicula. MAHR.
Paniala. MALEAL.
Pania. ,,
Pulim. SINGH.
Imbool. ,,
Imbool gass ,,
Elavum maram. TAM.
Elava maram ,,
Pur. TEL.
Buruga. ,,

There are six species of this genus of plants, five of which are natives of America but all known by the name of Wool or Cotton Trees. They are large trees, with spongy woods, which are used for little besides making canoes in the districts where they grow. Only this one grows in Asia and Africa. It attains a height of 150 feet or more, but there are two varieties described, the one growing in the East Indies and the other in Guinea, which differ chiefly in the colour of their flowers. The Indian variety *E. a. Indicum,* has flowers yellowish inside and white outside ; whilst that of Guinea *E. b. Africanum,* has large crimson flowers. The Guinea tree is one of the largest and tallest of the forest-trees and the trunk is employed for making the largest-sized canoes. In Ceylon, this is very common, up to an elevation of 2,000 feet. It is an elegant tree, common on the Coromandel Coast ; the leaves fall during the cold season, and blossoms appear in February before the leaves. It grows in many parts of the Deccan, but is not common on the Bombay side save in some parts of Khandeish. The trunk is perfectly straight. It yields a light wood, employed by the toy-makers or moochis, but is likewise used for making rafts and floats. The seeds are numerous, smooth, black, and enveloped in a very fine soft silky wool, used for stuffing pillows, like that of B. heterophyllum and Cochlospermum gossypium. The gum is termed *Katan or Huttian ke gond,* and is given in solution with spices in bowel complaints. At the Madras Exhibition of

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185[illegible], a very powerful bast from this was exhibited by Mr. Jaffrey.—*Roxb.* iii, 165, *O'Shaughnessy, p.* 227, *Ainslie's Mat. Med. p.* 208, *Drs. Gibson, Wight, Riddell, Mc Clelland and Cleghorn, Voigt, Thwaites, Mr. Jaffrey, Voigt,* 105, *Ains. M. E. J. R.*

EROOPOOTTOO-IRVOLLY. TAM.? A Palghat wood of a brown color, specific gravity 0·861. Used for buildings and bullock-yokes.—*Colonel Frith.*

ERUPUNA, TAM. Tremburapan MALEAL. The timber of this Malabar and Canara tree, is of a dark brown colour, with a yellow tinge, and in texture resembles the marda; it is heavy and strong, grows to about fifteen to eighteen feet long. The natives prefer it to other wood for rice-beaters, from its weight and texture. It produces a small black fruit which is of no use.—*Edye, forests of Malabar and Canara.*

ERYTHRINA, *Species.*

Thy-ka-dah. BURM.

A tree which grows to a large size, and is procurable throughout the province of Akyab. Its wood is used for making banghies, also for boxes.—*Cal. Cat. Ex.* 1862.

ERYTHRINA, *Sp.* The Mountain coral tree. A fine looking timber tree of this genus, producing a reddish wood, is not uncommon in the interior of Tenasserim. The Karens select this tree in preference to all others on which to train their betel vines.—*Dr. Mason.*

ERYTHRINA INDICA, *Lam.; Roxb.; W. & A.*

Erythrina corallodendron, β *Linn.*

Palita mandar. BENG. HIND.
Moduga vriksha. CAN.
Coral tree. ENG.
Indian Coral tree. ,,
Bastard teak. ,,
Moochy wood tree. ,,
Furrud. HIND.
Pangra. MAHR.
Panjirah. ,,
Pangri. MAHR.
Mundara. SANS.
Erabadoo gass. SINGH.

Kaliana murukai. TAM.
Murukka maram. ,,
Muluku murukku. ,,
Moochoo maram. ,,
Badida chettu? TEL.
Badapu chettu. ,,
Badidapu chettu. ,,
Barijamu. ,,
Barjapu chettu. ,,
Mahameda. ,,
Bandita chettu. ,,
Chalo-dhona. URIA?

A large tree, of Ceylon, of the peninsula of India, also growing in the Konkans, Bengal, Assam, Tenasserim, Martaban and Amherst, and in the islands of the Archipelago, everywhere, a pretty large tree; in India, flowering at the beginning of the hot season, its seeds ripening in June and July. In Ceylon, it grows in the hot drier parts of the island. In Ganjam and Gumsur, where it abounds, it attains an extreme height of 30 feet, circumference 2 feet, and from the ground to the intersection of the first branch, is 6 feet. It is a common tree in all parts of the Bombay country, but most so on the coast. Its place in the forests is generally taken by Erythrina suberosa. It supplies, in Tenasserim, a soft, white wood, as easily worked as the pine, and which might be made valuable for many economical purposes. It is the wood commonly used by the moochie men, for making light boxes, scabbards, children's toys &c. It is likewise employed in making rafts, and fishermen's floats, and is hollowed out and made into canoes. The wood used for the purpose in upper Hindustan is the Bombax ceiba. It is the "Moochee wood" of Madras, and is there, also, used for toys, light boxes and trays, and the varnished toys, from the Northern Circars, are made of it. For sword scabbards, it is a first rate material, and may be exported to Europe so soon as the eyes of the military public shall have been sufficiently opened to the necessity of sacrificing clank and shine to utility in the matter of sword-scabbards. The wood is exactly ⅓rd the weight of water, and of necessity very weak. It is particularly applicable to many purposes for which deal is employed at home, such as in making packing cases, &c., &c. The natives of Nagpore use it exclusively for scabbards. It is eaten by white ants easily. The timber, in Nagpore varies from 14 to 17 feet in length, and from 3 to 2½ feet in circumference, and sells at 3 annas the cubic foot. This tree is employed in many parts of India to support the black pepper vine. What renders these trees very proper for this purpose is their quick growth (from cuttings), their firm, permanent, though smooth bark, which never peels off and gives firm hold to the roots of the vine, and lastly, they are full of leaves and very shady during the hottest months of the year which shelters the vine from the intense heat of the sun and keeps the ground moist. As soon as the hottest weather is over, the leaves drop and expose the vines to the sun and weather during the cool season.—*Roxb.* iii, 249, *Drs. Ainslie, Wight, Mason, O'Shaughnessy, Cleghorn, and Gibson, Mr. Rohde, Capts. Sankey and Macdonald, M. E. J. Reports, Voigt, Thwaites.*

ERYTHRINA STRICTA, *Roxb.*

Dhol dak. HIND.
Bartho of N. W. Hills.
Coral tree.

Anashtar Hind of Plains.
Paliyara.

The wood of this peninsula and Panjab tree is white and soft, used for scabbards, for the chalni, or sieves, and as fuel. It is cultivated in the Panjab plains and wild in the outer Hills.—*Roxb.* iii, 251, *Powell.*

ERYTHRINA SUBEROSA, *Roxb.*

Muni. TAM.
Motaga. ,,

Muni? TEL.
Moduga. ,,

A small tree of Kumaon, Guzerat, Khandesh, of the Mahal districts east of the ghats, and a native of the Circars, growing in every soil

GSL

and [illegible]nation: leaves deciduous during the cold season. Flowers in February and March, soon after which the leaves appear; the trunk is generally erect and from eight to twelve feet to the branches. It is less common than the E. Indica, and the trunk is covered with deeply cracked corky bark. From Kumaon the timber is sent in small billets to be made into sieve frames—*Roxb.* iii, 253, *Voigt*, *Mr. Thompson.*

ERYTHRINA SUBLOBATA, *Roxb*; *W. & A.*

Erythrina maxima, *Roxb. in E. I. C. Mus. t.* 105

Badadumu? TAM.
Mullu moduga. TEL.
Badedam? TEL.

This tree is a native of the inland mountains of the Circars, and is frequently of great size, with branches spreading and numerous, and trunk without prickles. The wood, like that of all these species is remarkably light, soft and spongy, and is much employed by the moochies who make trunks, toys, and other things that are to be varnished, the wood retains its priming or under coat of paint better almost than any other and is not liable to warp, contract or split. The moochies at Condapilly and Nursapore are famed for their art in forming and varnishing this wood for toys, &c. It is planted by the Tamil people about their temples. In Bengal, the leaves fall during the cold season in February, when destitute of foliage, the blossoms appear and soon afterwards the leaves: the seed ripens in May, the trunk is perfectly straight in large trees, five or six feet in circumference, tapering regularly, and the seeds are enveloped in fine, soft, or silky wool, adhering slightly to them.—*Roxb.* iii, 254, *Mr. Rhode's MSS.*, *Mr. Jaffrey.*

ERYTHROSPERMUM PHYTOLACCOIDES, *Gard.* A middle sized tree of the Ambagamowa and Ratnapoora districts in Ceylon; growing up to an elevation of 1,500 feet.—*Thw. p.* 18.

ERYTHROXYLON AREOLATUM?

Shajr-ul-jin. AR.
Dawadar. DUK.
Deo dhari. HIND.
Devadara. SANS.
Devatharam. TAM.
Devadari. TEL.

The flowers of this small tree are very small and of a yellowish green colour. The wood is so fragrant that the inhabitants of Mysore use it in lieu of sandal wood. Its leaves, Devádarum kirai, *Tam.*, are used by the people as greens: and, bruised and mixed with gingelli oil, are used as a refreshing application to the head.—*Ainslie.*

EUCALYPTUS. This genus, consisting of lofty trees, is found in the Malay peninsula, but it is chiefly Australian, where the species occur in great profusion, and, with the leafless acacias, give a most remarkable character to the scenery. E. calophyllum, attains a height of 150 feet; and a girth of 25 to 30 feet is not an uncommon dimension of these trees:—E. obliquus (Stringy Bark); Stuartiana; fissilens, piperita; goniocalyx; viminalis; pulverulenta, amygdalina and others have been introduced on the Neilgherries. E. resinifera yields the Botany Bay kino. Large cavities occur in the stem of E. robusta, between the annual concentric circles of wood, filled with a most beautiful red or rich vermilion-coloured fluid, which flows out as soon as the saw affords an opening. E. rostrata of western Australia, is the mahogany of the colonists, also the Jarrah or Yarrah and has been recommended for the railway sleepers of India. E. resinifera is the red gum wood and E. piperita the blue gum wood of Australia. There are a number of Eucalypti trees growing at Madhohúr over 60 feet in height.

EUCALYPTUS, *Species.* Stringy bark tree of Australia, attains an elevation of 80 or 90 feet, tall, straight and massive with a circumference of 12 to 14 feet. It is used for flooring boards and in-door work.—*Bennett's Gatherings.*

EUCALYPTUS, *Species.* Red Mahogany tree and white Mahogany tree of Australasia, noble in appearance and woods when seen in planks are very handsome.—*Bennett's Gatherings.*

EUCALYPTUS, *Species.* The iron bark tree of Australasia, yields valuable timber, which lasts forty or fifty years. It suits equally well for under-ground work. sp. gr., is 1,211; it weighs 42 lbs. to the cubic foot.—*Bennett's Gatherings.*

EUCALPYTUS GLOBULUS, is now growing abundantly, both on the Neilgherry and Pulney Hills, and also at Bangalore, in Mysore. It is one of the most hardy of the genus and the best suited to the hills.

EUCALYPTUS GOMPHOCEPHALA. The woolly but gum tree of Australasia, attains a height of 75 feet. Its timber does not last above two years.—*Bennett's Gatherings.*

EUCALYPTUS MARGINATA, the box tree of Australasia. The old wood is applied for spokes and felloes, the young wood as gig shafts.—*Bennett's Gatherings.*

EUCALYPTUS PIPERITA, of New Zealand, is an excellent tree for ship building, but is not so durable as the iron bark tree. Its timber is used for naves and felloes of wheels and for under-ground work, grows to 70 or 80 feet in height with a circumference of 6 to 12 feet.—*Bennett's Gatherings.*

EUGEISSONIA TRISTIS, *Griff.*

Bartam. MALAY.

A palm growing on the hills about Ching,

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Mal[illegible] and Penang. The leaves are used in Penang in making mats for the sides of houses, also for thatch, and for all the purposes to which those of the *Nipa fruticans* are applied. —*Griffith's Palms.*

EUGENIA, a genus of plants named in honour of prince Eugene of Savoy. It contains nearly 200 species, though numbers have been removed to the genera *Nelitris*, *Jossinia*, *Myrcia*, *Sizygium*, *Caryophyllus* and *Jambosa*, in which are now contained the Clove-Tree, the Rose-Apple, and Jamoon of India, formerly included in *Eugenia*. This genus is confined to the hot and tropical parts of the world, as Brazil, the West India Islands, and Sierria Leone, and, in Asia, extends from the Moluccas and Ceylon to Silhet and the foot of the Himalaya. Some of the species secrete a warm volatile oil in their herbaceous parts ; abound in tannin : yield good wood : and a few have fruits which are edible, though not very agreeable, from being impregnated with the aroma of the oil. Dr. Wight gives, in Icones, the following species of Eugenia :

(E) angustifolia,
,, cymosa,
(N) acuminata,
,, bracteolata,
,, claviflora,
,, grata,
,, inophylla,
,, lanceolata,
,, leplantha.
,, Wightiana,
(R) Mooniana.
,, Willdenowii,
(J) alba,
,, amplexicaulis,
,, aquea,
,, cylindrica,
,, hemispherica,
,, lanceolaria,
,, laurifolia,
,, macrocarpa,
,, Malaccensis,
,, Munroii,
(J) pauciflora,
,, polypetala,
,, purpurea,
,, ternifolia,
(S) alternifolia,
,, Arnottiana,
,, brachiata,
,, calophyllifolia,
,, caryophyllifolia,
,, caryophyllœa,
,, cerasoides,
,, cordifolia,
,, corymbosa,
,, cymosa,
,, ferruginéa,
,, fruticosa,
,, glandulifera,
,, grandis,
,, jambolana,
,, jambolana, var. microcarpa,
,, lanceæfolia,
(S) montana,
,, myrtifolia,
,, Neesiana,
,, oblata,
,, obtusifolia,
,, operculata,
,, Paniala,
,, polyantha,
,, Praecox,
,, pulchella,
,, reticulata,
,, revoluta,
,, Rottleriana,
,, rubens,
,, rubicunda,
,, salicifolia,
,, sylvestris,
,, Thumra,
,, toddalioides,
,, venusta,
,, Wallichii,
,, Zeylanica,

Major Beddome mentions E. gracilis, *Bedd.* as growing on the banks of rivers in the Animullay hills and yielding a close-grained wood. Mr. Thwaites mentions as growing at no great elevation in Ceylon, the Eugenia decora, *Thw.*, a small tree near Galle ; Eugenia fluccifera, *Thw.*, a small tree at Reigam Corle ; Eugenia fulva, *Thw.*, a small tree at Pasdoon Corle ; Eugenia rivulorum, *Thw.*, a small tree, on the banks of streams, in the Singherajah forest, between Galle and Ratnapoora, and Eugenia terpnophylla, *Thw.*, a middle sized tree of Ambagamowa and Ratnapoora Districts, and Reigam Corle. Eugenia mabæoides, (*Wight Illust.*) grows in the central province, at an elevation of 4,000 to 7,000 feet. Eugenia Mooniana, *Wight, Ill.* is abundant in the central province, up to an elevation of 4,000 feet, and Eugenia Willdenovii, *DC.* Tambaleya-gass, *Singh.*, is common in the hotter parts of the island. Dr. McClelland names seven species of Pegu, viz.,

Eugenia nervosa, *E. pulchella*, *E. myrtifolia*, Tha-bai-jeen, *Burm.*, and *E. jambosa*, of the Southern parts of Pegu, afford dark strong wood.

Eugenia pulchella, Khway-tha-byai, is very plentiful in the Pegu and Toungoo districts.

E. vulgaris, Khway-tha phan, *Burm.*

E. ternifolia, Thab-yew-tha-byai and *E. jambolana* also occur, but less plentifully than *E. pulchella*. These Pegu woods all afford excellent close grained strong timber, but subject to the attack of white ants. Wood red colour, strong and adapted for house-building.—*Drs. Wight and McClelland, Voigt, Thwaites, Eng. Cyc. Major Beddome.*

EUGENIA, *Species.*

Thab-yeh-tha-pan. Burm.

The different kinds of Thabyeh, of British Burmah, have a hard red coloured wood, close, but not straight grained, and supposed to be brittle. The wood is subject to the attacks of white-ants. The stems are occasionally used for canoes. This is also used for house-building. Breaking weights of the "Thab-yeh-gah" E. caryophyllifolia, 254 lbs. A cubic foot weighs 50 lbs. In a full grown tree on good soil the average length of the trunk to the first branch is 30 feet and average girth measured at 6 feet, from the ground is 9 feet. It sells at 8 annas per cubic foot. (*Note.*—This seems to be Dr. McClelland's E. vulgaris.)—*Drs. McClelland and Brandis.*

EUGENIA, *Species.*

Tha bya. Burm.

A tree of Moulmein.—*Cal. Cat. Ex.* 1862.

EUGENIA, *Species.*

Tha-bya-gyin. Burm.

A tree of Moulmein. Wood soft, used in the ordinary purposes of a building material. —*Cal. Cat. Ex.* 1862.

EUGENIA ACRIS, *W. & A.*

Eugenia pimenta, *DC. var.* ovalifolia.
Myrtus pimenta, *Linn. var.* latifolia, *Roxb.*
,, acris, *Sw.*
Myrica acris, *DC.*
,, pimentoides, *DC.*

Wild Cinnamon Tree. Eng. | Sung. Hind.
,, Clove. ,, ,,

A small tree, grows in Bombay, the leaves have a pleasant smell when bruised. Timber hard, red and heavy, capable of being polished and used for mill cogs and other purposes, where much friction is to be sustained.—*Dr. Riddell, Voigt.*

EUGENIA ACUTANGULA. ?

Hinjolo. Uria.

Under these names, Captain Macdonald describes a tree of Ganjam and Gumsur, of extreme height 30 feet, circumference 4½ feet,

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and height from ground to the intersection of the first branch, 6 feet. Grows in abundance on the banks of rivers. The wood is not affected by damp, and is therefore generally used for the wooden framework at the bottom of wells. Rice pounders are also made of it. The bark is given medicinally to women after child-birth.—*Captain Macdonald.* (*Note.*—Is this the Barringtonia acutangula? See page 44.)

EUGENIA ALTERNIFOLIA, *Roxb.*; *W. Ill.*; *W. Ic.*

Movi chettu. TEL.
Moyi chettu. TEL.

Very common on the Nagari hills.—*Flora Andhr.*

EUGENIA AMŒNA, *Thwaites.* A small tree of Ceylon, at Kokool Corle and in the Dolosbage district, up to an elevation of 1,500 feet.—*Thw.*

EUGENIA BRACTEATA, *Roxb.*; *W. & A.*

Eugenia Roxburghii, *DC.*
" Zeylanica, *Roxb.*
" læta, *Ham.*
Myrtus bracteata, *Willde.*
" littoralis, *Roxb. in E. I. C. Mus.*
Myrtus Coromandeliana, *Köen.*
" ruscifolia, *Willde.*
" latifolia, *Heyne.*
" Heynei, *Spreng.*

Aramanda. TEL.
Arivita. "
Goragamudi. TEL.

A shrub, frequent in low jungles near the sea on the Coromandel coast, in the Northern Circars. Grows also at Jaffna in Ceylon. It is only used for firewood.—*Roxb.* ii, 490, *Flora Andh.*, *Thwaites*, *Voigt*, 47.

EUGENIA CARYOPHYLLIFOLIA, *Roxb.*; *W. Ic.*, 553.

Calyptranthes caryophyllifolia. *Ains.*

The tree.

Choto jam. BENG.
Thab-yeh-gah. BURM.
Naradidi Vriksha. CAN.
Nawel wood tree. ANG-TAM.
Jamoon. HIND.
Koata naga? TAM.
Naurei. "
Nawel maram. "
Neredu manu. Tel.
" chettu. "

The fruit.

Jamoon ka phal. DUK.
Nawel fruit. ENG.
Kaka jemboo. SANS.
Batte dombe. SINGH.
Nawel pallam. TAM.
Neredi pandoo. TEL.

This large growing timber tree is a native of various parts of India growing luxuriantly in almost every soil and situation. Grows in Coimbatore, in the Northern Circars, in Bengal and British Burmah. Flowering time the hot season; bears a round berry, black when ripe, the size of a pea. Ainslie gives a favorable account of the timber, which he describes as very strong, close grained, hard and durable. The wood is light, and chiefly used for making grain measures, but is also made into carriage frames, cots, &c., and, in Ceylon, for common house-building: a cubic foot weighs 45 lbs. and lasts 20 years. The different kinds of Eugenia, called Thab-yeh in British Burmah, have a hard, red coloured wood, but not straight grained, and supposed to be brittle. The trunks are occasionally used for canoes, especially those of Thab-yeh-gah, the breaking weight of which is 254 lbs. A cubic foot weighs 56 lbs. In a full grown tree on good soil, the average length of the trunk to the first branch is 20 feet, the average girth measured at 6 feet from the ground is 6 feet. It sells at 8 annas per cubic foot. The bark is astringent, and is used in decoction by the natives for dysentery. The fruit when ripe, is of a very dark purple colour, and about the size of a large cherry. In taste, it somewhat resembles the sloe, but is much sweeter.

A variety of this tree,

Oojla jamoon ka phal. DUK.
Sweta jemboo. SANS.
Vullaynawel pallam. TAM.
Tella neredi pandu. TEL.

has a fruit nearly similar to it in natural qualities and has got its name from being of a different colour (white).—*Drs. Roxburgh*, ii, 486, ***Wight***, *Ainslie*, *Riddell*, *and Brandis*, *Mr. Rhode's MSS.* *Voigt*, *Cal. Cat. Ex.* 1862, ***Mendis.***

EUGENIA CARYOPHYLLATA, *Thun.*

Caryophyllus aromaticus, *Linn.*
Myrtus caryophyllus, *Spreng.*

Luvunga. BENG.
Clove tree. ENG.
Ran jambool. MAHR.

A tree of the Moluccas, but cultivated in Ceylon, the Malay Peninsula, in the south of India, in Travancore, also in the Mauritius and Bourbon. The cloves of commerce are the unopened flowers, the flower buds. It is hardly found on the Bombay side, north of the Savitree. South of that river it is found only in the Raee or greenwood jungles, and about temples. The wood appears quite equal to that of the common Jambool, the Eugenia jambolana.—*Roxb.* ii, 490, *Gibson*, *Voigt*, *M. E. J. R.*

EUGENIA CERASOIDES, *Roxb.*

Thab-yeh-gyin. BURM.

The different kinds of Thab-yeh of British Burmah have hard red coloured wood, but not straight grained and supposed to be brittle. The stems are occasionally used for canoes. A cubic foot weighs 51 lbs. In a full grown tree on good soil the average length of the trunk to the first branch is 40 feet and average girth measured at 6 feet from the ground is 9 feet. It sells at 8 annas per cubic foot.—*Dr. Brandis Cal. Cat. Ex.* 1862.

EUGENIA JAMBOLANA, *Lam.*; *Roxb.*

Syzigium jambolanum, *DC.*; *W. Ic.* *W. Ill.* *W. & A.*
" caryophyllifolium, *D C.*
Eugenia jambolana. *Lam.*
" jambolifera, *Roxb in E. I. C. Mus.*
" obtusifolia, *Roxb. Fl. Ind.* 2, *p.* 485.
" caryophyllifolia, *Lam.*
Calyptranthes jambolana, *Willde.*
" caryophyllifolia, *Willde.*
Myrtus cumini, *Linn.*

Ja[illegible] tree. ANGLO-HIND.
Kalo-jam. BENG.
Kalo-jamun. ,,
Nœrala mara. CAN.
Jamoon. HIND.
Burra jamon. ,,
Rai jamun. ,,
Perin jara. MAHR.
Jambool. ,,
Alubo. SINGH.
Nawell maram. TAM.
Koatti naga maram? TAM.
Nirarlay? ,,
Peru nagal. ,,
Sina naga. ,,
Sirru naga. ,,
Kotti naga maram. ,,
Neradi. TEL.
Pedda neredu. ,,
Sanna neredu. ,,
Jamo. URIA?
Bodo jamo. ,,
Coojee jamo. ,,

Mr. Robert Brown of the Madras Agri-Horticultural Gardens says he sent for specimens according to the Tamil names, Nawel maram and Naga maram, and they were both the same plants: and, as far as he could make them out, the following are one species:

Syzigium jambolanum.
Eugenia caryophyllifolia.
,, jambolana.
Calyptranthes caryophyllifolia.
,, jambolana.

This tree presents difficulties to its identification botanically. It is a large and handsome tree, flowers in February and March, and thrives in any good soil. It occurs in the central province of Ceylon, and is met with in gardens all over the peninsula of India. About Madras, this tree is generally much destroyed by the Carpenter bee. It likewise, grows in the Bombay side of India, in their ghat and Konkan forests, also pretty extensively near villages, where it has been planted; in Coimbatore, in Ganjam and Goomsur, in Bengal and Kumaon. The tree is not very common either in Bodo-goda or lower Goomsur, but it is said to be rather plentiful in the Chokapaud forests. There are two kinds there termed respectively the "Bodo" and "Coojee" Jamo. Dr. Wight, writing in Coimbatore, says "of this wood I have no knowledge, it is said to be brittle and bad, but is described by Ainslie as fit for house-building purposes." But Dr. Gibson thinks that Dr. Wight under-rates the quality of the wood and he says that it makes excellent beams, but on account, probably, of its brittleness, is never cut up for cabinet purposes. It is, however, employed in Ceylon, for common house-building.

Lieut. Col. Lake writing in Jhullunder says, this tree attains a good size, the length of trunk to first branch being 10 feet, and the circumference 6 feet. It attains full size in 40 years; wood hard and brittle, heart-wood tough, of a dark red colour, liable to warp a little; not subject to worms; used by zemindars for agricultural implements, and produces good timber. There is, he says, a variety of this tree called "Kuthummun," a smaller tree, bearing smaller fruit, and shorter leaves. In the south of India, the fruit of the best sort is as large as a common blue plum, which it resembles in appearance; it has a rough astringent flavour, and should be soaked in salt and water before it is eaten. The fresh stone, if planted, grows immediately. Major Pearson says *Eugenia jambolana* is common in Nagpore, and has the peculiar property of resisting the effects of water almost for ages. The bark affords a large supply of kino extract.—*Roxb.* ii, 484, *Drs. Riddell, Wight and Gibson, Captain Macdonald, Mendis, Voigt, Major Pearson, Lt. Col. Lake, Commissioner, Jhullunder Division, quoting Balfour, page* 113 *and Roorkee Proceedings papers on Gwalior Timber, page* 32.

EUGENIA JAMBOS, *Linn.*

Jambosa vulgaris, *D C.*

Gulab jam. BENG.
Gulabi jam. DUK.
Rose apple. ENG.
Jamb. HIND.
Jam. MALEAL.
Gulab-jamun. PERS.
Raja jembu. SANS.
Jambo. SINGH.
Jambu-nawel maram. TAM.
Jembu-neredi manu. TEL.

Grows in both the Indian peninsulas, in Bengal and Sirmore. This tree bears a light whitish yellow fruit, pear shaped, with smooth skin, having a rose flavor, whence its English name. It is commonly cultivated in gardens on the coasts and in Hyderabad. It is easily propagated by seed, and grows luxuriantly in a good garden soil. The red coloured species, having the same flavor, is called the Jambo Malacca. The fruit is not much esteemed. In Tenasserim, the rose apple is cultivated to a small extent in European gardens.—*Drs. Ainslie, p.* 228, *Roxb.* ii, 494, *Mason and Riddell.*

EUGENIA LAURINA.—?

Wal boamboo. SINGH.

Under these names, Mr. Mendis mentions a timber tree of the central province of Ceylon, used in house-buildings. A cubic foot weighs 36 lbs. and it lasts 15 years.—*Mendis.*

EUGENIA MAIRE. The maire tree of New-Zealand, attains a height of 25 to 30 feet, and a circumference of 3 to 4 feet. Its wood is hard, close-grained, heavy, and is used for war clubs and paddles, machinery and wood engraving.—*Bennett's Gatherings p.* 416.

EUGENIA MALACCENSIS, *Linn.*

Jambosa Malaccensis, *DC.*
,, purpurascens, *DC.*
Jambosa domestica, *DC.*
Ohia-ai of Sandwich Islands.

Malaka amrool. BENG.
Namball paio. MALEAL.
Jambu Malacca maram. TAM.

This tree grows in the Sandwich Islands, but was brought to India from Malacca. The fruit somewhat resembles a pear in shape, is pleasant to the taste, is reckoned very wholesome, and bears some resemblance in taste to a juicy apple, but it is a very indifferent fruit. —*Drs. Ainslie, Roxb.* ii, 483, *and Mason, Bennett's Gatherings, Voigt,* 47.

EUGENIA MOONIANA, *Wight.*

Pinibaru. SINGH.

A Ceylon tree with a small but hard and very tough wood, used for handles of hammers, for stone-breaking, &c.—*Mr. Fergusson.*

EUGENIA OBTUSIFOLIA, *Roxb.*

Thab-yeh-gjo. BURM.

The different kinds of Thabyeh of British Burmah have hard, red coloured wood, but not straight grained and supposed to be brittle. The stems are occasionally used for canoes. A cubic foot weighs 48 lbs. In a full grown tree on good soil the average length of the trunk to the first branch is 20 feet, and average girth measured at 6 feet, from the ground is 9 feet. It sells at 8 annas per cubic foot.—*Dr. Brandis, Cal. Cat. Ex. of* 1862.

EUGENIA OHIA-HA, the Ohia-ha of the Sandwich Islands, is used for building purposes, and its bark yields a dark brown or red dye.—*Bennett's Gatherings.*

EUGENIA SALICIFOLIA.

Sizygium salicifolium, *Wall.*

Ran jambool.

The timber of this tree is used for rafters in the Bombay presidency.

EUGENIA WILLDENOVII, D. C.

Tambeleya. SINGH.
Kotala-gas. ,,
Kyan. TAM.
Pandy kyan. TAM.

Grows "at Trincomalie, where it is one of 'the useful timber trees.'—*Mr. Fergusson.*

EUONYMUS, a genus of plants several species of which, viz., E. acutangulus, bullatus, crenulatus, dichotomus, garcinifolia, glaber, Goughii, grandifolia, grossus, Hamiltonianus, pterocladus and revolutus, are small trees and Major Beddome notices E. crenulatus, *Wall. W. & A.* also E. dichotomus *Heyne*, which grows in Courtallum, Colemala and the south of the peninsula, with very valuable timber.

EUONYMUS GARCINIFOLIA, *Roxb.*

Mori, Sylhet.
Nooe, Nepal

Grows in Sylhet and Nepal. As a small tree, is growing near the Bombay ghats in the upper country to the south, and is said to be often cultivated in Canara, on account of its straightness, as applicable for house rafters. It does not reach a size sufficient to fit it for general purposes.—*Dr. Gibson.*

EUONYMUS FIMBRIATA, *Wall.*, *and* E. HAMILTONIANUS, *Wall.*

Barphali of KAGHAN.
Siki. PANJAB.
Battal ,,
Pakua. ,,
Chual. ,,
Pash. ,,
Renai. ,,
Tritlu. ,,
Sidhera. ,,
Rung Chal. ,,
Wattali. PANJABI.
Dudhapar. ,,
Hanchu. ,,
Mara. ,,
Papar. ,,
Banchor. ,,
Karum. ,,
Chikan. ,,
Kioch. ,,
Sikhi of MURREE.

These two trees are common in many places in the Panjab Himalaya, up to near the Indus, the former at from 6,000 to 10,500 feet, the latter at from 3,800 to 8,500 feet. They do not grow to a large size and are not valued for building purposes, but the wood is white, close-grained beautifully smooth and tough, and spoons are made of it.—*Dr J. L. Stewart, p.* 41, *Mr. W. Powell, Hand-book.*

EUONYMUS REVOLUTUS, *Wight Ill.* 178.

A middle sized tree of Newera and other very elevated parts of Ceylon.—*Thw. En. Pl. Zeyl., p.* 73.

EUPHORBIA, *Species.*

Yamula. BURM.

Used for frames of lacquered ware.

EUPHORBIA ROYLEANA.

Leafless Euphorbia. ENG.
Chun. HIND.
Thohr. HIND.

This grows much, wild, in the Lower Siwalik hills, and on the plains as a hedge plant. It frequently attains to the considerable height of 20 to 30 feet. Dr. Stewart was informed by Dr. Henderson that the leafless Euphorbia often has a stem 18 inches in diameter, and that it is used for fire wood.—*Dr. J. L. Stewart.*

EUPHORBIA TIRACULLI, *Linn.*

Lanka sij. BENG.
Unarmed milk bush ENG.
Milk hedge. ,,
Milk bush ,,
Common hedge plant. ,,
Seyr-Tej. MAHR.
Gas-nawahandi. SINGH.
Kulli. TAM.
Tiru kulli. TAM.
Manchee jamudu. TEL.
Lodhoka sijhoo. URIA ?

The wood is light-coloured, and, when mature, is reckoned very strong and durable when not exposed to wet. On the Bombay side, it is extensively used, whenever procurable of sufficient size, as a dunnage material for the flat roofs of houses. It is sufficiently close-grained to be useful to turners. Could be readily creosoted, but is very seldom of scantling sufficient for sleepers. Wood light coloured, the root of old shrubs is understood to be well adapted for gun stocks, but plants of sufficient age are seldom met with. Dr. Wight had often heard it spoken of as excellent for gun stocks, but it seemed to him too light-coloured. On the Godavery it grows to a large tree and the wood seems hard but is not used. In Goomsur and Ganjam it is not common, but extreme height 20 feet, circumference 2 feet, and the height from the ground to the intersection of the first branch, 6 feet.—*Drs. Roxb.* ii, 470, *Wight, Gibson and Cleghorn, Captains Beddome and Macdonald.*

EUPHORIA LITCHI, *Desf.* A fruit tree, introduced from China, the Litchi attains a height of 25 to 30 feet but does not ripen its fruit at Madras. It grows well in the Mauritius and in Bengal.

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EURYA, *Species.*

Thaun. BURM.

Used in Tavoy for fuel only.

EURYA JAPONICA, *Thunb.*

Neyadasse-gass. SINGH.

Var. α. E. Thunbergii.
Var. β. E. acuminata.
Var. γ. E. Chinensis.
Var. δ. E. parviflora.

Vars. α, β, and δ grow in the more elevated parts of Ceylon island, up to 8,000 feet ; δ in exposed situations ; var. β from a little above the sea-level, up to an elevation of 5,000 feet, very abundant.—*Thw. En. Pl. Zeyl.*, *I.*, *p.* 41.

EXCŒCARIA, *Species* ? Thurrotha. BURM. A Tavoy wood.

EXCŒCARIA AGALLOCHA, *Linn.* ; *Roxb* ; *W. Ic.*

Uguru, Sunderbuns, BENG
Geng-wa. ,,
Boue-bayaza. BURM.
Tella keeriya gass. SINGH
Tella chettu. TEL.

In Ceylon, very common near the sea, grows in the Sunderbunds, and is plentiful in the Rangoon and Tounghoo districts. Wood white coloured and adapted for every purpose of house-building. Its wood has no aromatic properties.—*Roxb.* iii, 756, *Voigt*, *McClelland.*

EXCŒCARIA JAMETTIA, *Spreng.*

Tiger's milk tree. ENG.
Kametti. MALEAL.

Grows on the western coast of India. It abounds in an acrid juice, from which a good kind of caoutchouc may be prepared.—*Useful Plants.*

EXCŒCARIA OPPOSITIFOLIA, *Jack*, in Cal. Journ. of Nat. Hist. IV, p. 386.

Common in the Central Province of Ceylon, at an elevation of 4,000 to 6,000 feet.—*Thw. En. Pl. Zeyl.*, *p.* 269.

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FAGRÆA FRAGRANS, *Roxb.*

Annah-beng. BURM. ? of Martaban.
Annan. BURM. ? of Amherst, Tavoy and Mergui.
Annan-tha. BURM. ? of do. do. do.

This useful tree grows in Martaban, Tenasserim, inland, particularly up the Attaran river : is very abundant in Amherst, Tavoy and Mergui, and in the islands of the Tenasserim Coast, it grows also in China and it is cultivated in Penang. Its maximum girth is 4 cubits, and maximum length 20-25 feet, but it is of so slow growth that the Burmese refer to it in a proverb. When seasoned, it sinks in water. In Martaban, it is described as a compact, hard, yellow and very beautiful wood. In Tenasserim, also, as a very hard and excellent timber. In Amherst, Tavoy and Mergui, though almost imperishable, it is not found capable of bearing so heavy a strain as some of the other valuable woods of the province. It bears a breaking weight of 400 to 500 lbs., and its chief value as a timber is its imperishability when exposed to water or damp. Mr. Riley and Captain Dance say that the Teredo navalis will not attack it, and Captain Dance mentions that neither heat nor moisture will warp or rot it, that it is impervious to the attacks of ants, and that the posts of a wharf at Tavoy, which for several years had, daily, as the tides flowed and ebbed, been partly dry and partly wet, continued untouched by the worms. It is used for building houses, kyoungs, zyats, &c., posts for buddhist edifices, piles for bridges, wharves, &c., but for lay purposes only by the English, as the Burmese regard it as too good for the laity, and say it ought to be confined to sacred purposes. Hence, as the phoongies or Burmese priests look on it as a sacred tree, Annan wood has been more preserved in the forests of Amherst, Tavoy and Mergui than any other valuable wood : it is scattered thickly over the alluvial plains together with Strychnos nux vomica. It has been recommended for railway sleepers. Dr. Wight in Icones figures three species of this genus, amongst them, F. Coromandeliana ; and Malabarica, F. obovata is a tree of the Khassya mountains and Singapore ; F. Malayana, a tree of Penang ; and F. lanceolata of Java and Penang, the properties of which are not known.—*Rev. Mr. Mason's Tenasserim*, *Captain Dance's Report*, *Dr. McClelland's Report*, *Roxb.* ii, 33, *Voigt*, 545.

FALCONERIA INSIGNIS, *Royle*, *Ill. H. B.*

F. Malabarica, *Wight.*
Lodhar of Kangra.

Grows in Dhera Dhoon and in Kumaon to 12 feet with a girth of 3 feet ; also on the western side of the Peninsula of India. Timber used for making frames for native drums. —*Mr. R. Thompson*, *Voigt.*

FALCONERIA WALLICHIA, *Royle.*

A tree of Nepaul.—*Voigt*, 295.

FERONIA ELEPHANTUM, *Corr.*

Anisifolius, *Rumph.*
Cratæva vullanga, *Kon.*

Kat bel. BENG.
Bilvar titha mara. CAN.
Cavita vriksa. ,,
Wood-apple tree. ENG.
Elephant apple tree. ,,
Koit ka jhar. HIND.
Koit. MAHR.
Kowta. MAHR.
Kawtha. ,,
Velaga. MALEAL.
Bilin of Panjab.
Vella maram. TAM.
Vellanga maram. ,,
Valaga chettu. TEL.

The large and tall wood-apple tree, one of the Citraceæ or Citron tribe, is well known in India and it extends into the Moluccas. It is somewhat scarce in the Panjab and Kumaon and not appreciated there. It is widely diffused in Southern India, being met with in the Northern Circars, generally

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through the Madras Presidency, in Coimbatore, is very common in the inland jungles of the Bombay Presidency, where it grows well everywhere ; and, in Guzerat, it attains a good size. In the Nalla Mallai hills also the wood-apple tree attains a large size, and the wood is rather heavy, light-coloured, strong, hard and durable. In Coimbatore the tree attains a large size, and its wood is white, hard and pronounced durable. A specimen which was tried bore 360 lbs. In Vizagapatam, it yields a hard, strong, heavy wood, and is there much used in house-building, but said not to be very durable. In Guzerat, it is used in building, and could possibly be creosoted so as to withstand exposure. Its spheroidal fruit, when ripe contains a dark-brown, agreeable sub-acid pulp. When an incision is made in the trunk, a transparent oily fluid exudes which is used by painters for mixing their colours. Both leaves and flowers have a strong odour of anise, and the young leaves are given in bowel-complaints of children as a stomachic stimulant. It yields a large quantity of a clear white gum (Koit ka gond, *Hind.*), much resembling Gum Arabic in its sensible properties. It is very abundant, and forms the well known "East India Gum Arabic ;" and, from its ready solubility without residue it gives the best mucilage for making black ink.—*Roxb.* ii, 411, *Mr. Rohde, M. E. J. R., Dr. Gibson's Report, M. E. Jur. Rep., Dr. O'Shaughnessy, Dr. Wight's Report, English Cyclopædia, Messrs. Powell and R. Thompson, Voigt,* 141.

FERREOLA BUXIFOLIA, *Roxb.*

Maba buxifolia, *Pers.*

Eroombala, ANGLO-TAM. | Eroombala maram. TAM.
Illumbilli maram. TAM. |

This plant grows among the Circar mountains to the size of a small tree, but, in the low countries, it is only a shrub. The wood is dark-coloured, remarkably hard and durable ; when its size will admit, it is employed for such uses as require the most durable heavy wood. Its small red fruit, containing one seed when ripe, is pleasant to the taste and is eaten all over the lower provinces of India.—*Roxb.* iii, 790, *Ainslie, p.* 254, *Mr. Rohde's MSS, Voigt,* 346.

FICUS, a genus of tropical plants, many of which occur in South Eastern Asia,—Dr. Wight in Icones gives 54 species. Amongst those which attain the height of a tree, several are remarkable for throwing out aerial roots, from their branches, which grow into the ground and again throw out branches. Some are valuable as fruit trees, and others yield viscid and useful juices, but few of them are useful for timber. Amongst those for which a mere notice will suffice, are the Ficus carica, the common fig tree, cultivated in many parts of India. Ficus Benjaminoides, the Tenasserim Banyan tree, which drops aerial roots like the Indian fig tree, grows amidst mangroves and near tidal streams. Ficus cinerascens, *Thw.*, the Walgoona-gass of Ceylon, is a large tree of the warmer parts of that island. F. citrifolia, *Willde*, grows in Ceylon and on the western side of India, where some parts of it are employed in medicine. Ficus disticha, *Blume*, grows in the Central Province of Ceylon, at an elevation of 3,000 to 5,000 feet, and F diversiformis, *Miq.*, is very common in Ceylon, up to an elevation of 2,000 feet. The root of Ficus excelsa, *Vahl.*, of peninsular India and the Moluccas, is given in decoction, as a purgative. A soft, grey timber is obtained from the F. Gooleeria, *Roxb.*, which grows in Hindostan and Chota Nagpore. F. heterophylla, *Roxb.* Wal-ahatoo, *Singh.*, is common in Ceylon, in damp shady places. F. infectoria, *Willde*, is of Ceylon and India, and its bark is chewed with betel, in lieu of the Areca nut. Ficus laccifera, *Roxb.* Nooga-gass, *Singh.*, is not uncommon in the Central Province of Ceylon. F. lanceolata, *Roxb.* Tha-pan, *Burm.*, of Pegu, yields a soft useless wood. F. lucida, *Ait.*, the Kappootoo-bo-gass of Ceylon, occurs in the drier parts of that island. F. nitida, *Thunb.*, which grows in the south of China and in many parts of India, is a valuable ornamental tree and good for shade. The F. racemosa, *Linn.*, of India, produces a fruit of little value. Ficus religiosa, *Linn.*, the Pipul of India, and Bo tree of Ceylon, is a graceful and ornamental plant. F. t'siela, *Roxb.*, is common, but its timber is of no value. —*Drs. Roxb., Wight and Gibson, Thwaites, Voigt.*

FICUS, *Species.*

Baee dhimeree. URIA?

A tree of Ganjam and Goomsur ; extreme height 30 feet, circumference 2½ feet, and height from ground to the intersection of the first branch, 8 feet. It is burnt for firewood, being tolerably common. The leaves are used for eating from ; the fruit is eaten.—*Captain Macdonald.*

FICUS, *Species.*

Kulli kao. CAN.

Generally a climber. Abounds in Canara and Sunda, in the country from Bilgy to the Ghats. Juice peculiarly abundant and viscid, and used as a bird-lime. Well merits a further examination.—*Dr. Gibson.*

FICUS, *Species.*

Thubboo. BURM.

A Tavoy tree, used in house carpentry.

FICUS, *Species.*

Thuppan. BURM.

In Tavoy, a large tree ; wood not used.

FICUS ASPERRIMA, *Roxb.*

Ficus ampelos, *Burm.*
Ficus pohloria, *Moon.*

Wana maddiya-gass. SINGH.
Pindi chettu. TEL.
Karasa. „
Tella barranki. TEL.
Barranki chettu. „

A large tree, a native of the peninsula of India, and grows in Ceylon, up to an elevation of 2,000 feet. The trunk is remarkably short, but very thick and sometimes so completely covered with small very leafy branchlets, as to be entirely hidden. The leaves are used to polish ivory, horn, &c., and, in Ceylon, are in general use amongst native cabinet makers as a substitute for fine sand-paper, similarly to those of the Trophis aspera.—*Voigt, Thwaites, Mr. Rohde's MSS.*

FICUS BENJAMINA, *Linn.*

Kamrup. BENG.
Oval-leaved fig tree. ENG.
Warangan. MALAY ?
Itti alu. MALEAL.
Tella barranki. TEL.

Grows in peninsular India, also in the Archipelago. Is a valuable avenue tree.—*Roxb.* iii, 550.

FICUS CARICOIDES.

Wild Fig. ENG.
Anjíri. PANJAB.
Phagwárí. „
Indzar. PASHTU.
Kak or kok of Kanawar.
Kuwári or puári of Kaghán.
Phág „
Phagura „

A specimen of this Panjab wood was sent from the Delhi district. The tree is common in the Himalaya ; its timber is used for fuel and agricultural purposes : its fruit occasionally excellent —*Powell, Hand-book, Econ. Prod., Panjab, p.* 79.

FICUS CORDIFOLIA ?

Nga thiu-gyee. BURM.
Heart-leaved fig tree. ENG.

A tree of Moulmein and the Tenasserim Provinces. In Tenasserim, this tree usually supplies the place of the peepul in the public places, and in the neighbourhood of religious edifices. It approaches nearest to *F. religiosa*, yet is easily distinguished from it by the leaves being narrower in proportion to the length, with much shorter points, and the fruit being perfectly round and not, as in *F. religiosa*, vertically compressed. It yields a strong wood, fit for any ordinary purpose.—*Dr. Mason, Cal. Cat. Ex.* 1862.

FICUS ELASTICA, *Roxb.*

Kusnir. BENG.
Elastic fig tree. ENG.
Caoutchouc tree. ENG.
Indian rubber tree. „

The Indian Caoutchouc tree inhabits the Pundua and the Juntipoor mountains, which bound the province of Sylhet on the north, where it grows to the size of a European sycamore, and is called (Kasmeer or) Kusnir. This tree abounds in Assam, but the outer Himalaya at Punkabarree, is its western limit. It penetrates amongst the mountains, as far as the Teesta valley in Sikkim, but is of small size. It is chiefly found in the chasms of rocks and over the declivities of mountains among decomposed rocky and vegetable matter. It produces when wounded a great abundance of milk, which yields about one-third of its weight of caoutchouc. It grows with great rapidity ; one tree was described as being 25 feet high, with the trunk a foot in diameter when only four years old. Its juice is used by the natives of Sylhet to smear the inside of split rattan baskets, which are thus rendered water-tight. Old trees yield a richer juice than young ones. The milk is extracted by incisions made across the bark, down to the wood, at a distance of about a foot from each other, all round the trunk or branch up to the top of the tree, and the higher the more abundant is the fluid said to be. After one operation the tree requires a fortnight's rest, when it may be again repeated. When the juice is exposed to the air it separates spontaneously into a firm elastic substance, and a fetid-whey-coloured liquid. Fifty ounces of pure milky juice taken from the trees in August yielded exactly 15½ ounces of clean-washed caoutchouc. This substance is of the finest quality, and may be obtained in large quantities. It is perfectly soluble in the essential oil of cajeput.—*Roxb., Fl. Ind., III,* 541, *Hooker, Him. Jour., Vol. I, page* 102, *and II, p.* 13, *Voigt.*

FICUS GLOMERATA, *Roxb.* ; *Willde, Rheede* ; *W. Ic.*

Ficus cunia, *Buch.*
„ racemosa, *Willde.*
Covellia glomerata, *Miq.*

Juguya doomoor. BENG.
Rulla ? kith mara. CAN.
Kulla kith mara. „
Oombur. DUK.
Glomerous fig tree. ENG.
Gooler. HIND.
Perena teregram. MALEAL.
Bat-bar. PANJAB.
Badarin. „
Dashri of „
Rumar or rumal, or rumbal of Kangra.
Pala of Panjab.
Atteekka-gass. SINGH.
Atti maram. TAM.
Medi chettu. TEL.
Atti chettu. „
Bodda chettu. „
Paidi chettu. „

A large tree, thrives best near a water-course, or on the banks of rivers, fruit like the common fig, but grows in clusters along the branches ; flavour insipid, but eaten by the poorer classes. In Ceylon, it is common on the banks of rivers, up to an elevation of 2,000 feet ; grows also in the peninsula of India, the Konkans, at Taong Dong, Moulmein, Nepaul, the Panjab and all over Oudh. The wood is used there for furniture, and, in the Panjab, as well-frames. Some of the lac of commerce is gathered from this tree. Mr. Jacob writing from the Central Provinces says that the Ficus glomerata, is rarely to be had straight, there, but grows occasionally of large dimensions, and resists decay while submerged in water, perhaps longer than any timber known, for which

GSL

rea[illegible] it is constantly employed as foundation for the masonry lining of wells, and frequently used, alone, as lining; Mr. Jacob and Lt. G. Doveton write from there that it is remarkable for its strength, and is exceedingly light. It is not used for furniture in that part of the country, nor is the wood thought capable of taking a good polish. The tree is abundant in the Ceded Districts. Mr. Latham says that in the Nalla Mallai it grows to a height of 40 feet with a circumference of 4½ feet; bandy wheels are made from it. It is straight-grained, strong, and appears useful; it is considered sacred, and is burnt when libations are offered: a medicinal extract is obtained from the root.—*Cal. Cat. Ex. of* 1862, *Mr. Latham, Voigt, Thwaites, Mr. Rohde's MSS., Fl. Andh., Lt. G. Doveton, C. P., Mr. W. Jacob, Dr. J. L. Stewart.*

FICUS INDICA, *Linn.; Roxb.*

Ficus Benghalensis, *Linn.*
Urostigma Benghalense, *Miq.; Gasp.; Rheede: W. Ic.*

But.	BENG.	Bargat or Bor of Panjab	
Bat.	,,	Vata vriksha.	SANS.
Bar.	,,	Manugah.	SINGH.
Ahlada mara.	CAN.	Maha nooga-gass.	,,
Indian fig tree.	ENG.	Kiripelle.	,,
Banyan tree.	,,	Ala maram.	TAM.
Bengal fig tree.	,,	Marri chettu.	TEL.
Bar ka jhar.	HIND.		

The Indian Fig tree grows in most parts of the mainland and islands of India and in the hotter parts of Ceylon, where, however, it seems to have been introduced. It is found in great perfection and beauty about the villages on the skirts of the Circar mountains. Its fruit, the figs, grow in pairs, and, when ripe, are about the size and colour of a middle-sized red cherry. If the seeds drop into the axils of the leaves of the palmyra-tree, the roots grow downwards, embracing the palmyra trunk in their descent; by degrees, they envelop every part except the top, whence, in very old specimens, the leaves and head of the palmyra are seen emerging from the trunk of the Banyan tree, as if they grew from it. The Hindus regard such cases with reverence, and call them a holy marriage instituted by Providence. These married trees are particularly numerous in the south part of the Hyderabad country near the Kistnah. Some of these trees cover an immense space even when comparatively young. In the Botanical Gardens at Calcutta, Dr. Falconer ascertained the great Banyan tree, which is still the pride and ornament of the garden, to be only seventy-five years old; for, people were then alive who remembered well its site being occupied in 1782, by a date-palm, out of whose crown the Banyan sprouted, and beneath which a devotee sat. In 1834, I paced, at noon, the outer shadow of its branches, and the circumference was then near 360 paces; Dr. Hooker writing after that mentions that this tree was eighty feet high, and throws an area, 300 feet in diameter, into a dark cool shade. I paced its shadow, again, in 1863, and it was then only 300 paces, similar to what Dr. Hooker had found it. Large banyans are common in India; but few are so symmetrical in shape and height, as that in the Calcutta gardens. Dr. Roxburgh had seen such trees full 500 yards round the circumference of the branches, and 100 feet high, the principal trunk being more than 25 feet to the branches, and 8 or 9 feet in diameter. Marsden mentions a remarkable banyan or burr tree, near Manjee, twenty miles west of Patna in Bengal, diameter 363 to 375 feet, circumference of shadow at noon 1,116 feet, circumference of the several stems, in number fifty or sixty, 921 feet. Under this tree sat a naked devotee, who had occupied that situation for twenty-five years; but he did not continue there the whole year through, as his vow obliged him to lie, during four cold months, up to his neck in the waters of the river Ganges. A remarkably large Banyan tree grows, or grew, on an island in the river Nerbudda, ten miles from the city of Baroach, in the province of Guzerat, and was described by Colonel Sykes. It is called the Kabir Bar, a name said to have been given to it in honour of a saint, but more probably from "Kabir" the Arabic adjective for great. It was once much larger than at present, but high floods have carried away the banks of the island on which it grows, and with it a portion of the tree. Indian armies, when in that neighbourhood, have encamped around it, and at stated seasons Hindu festivals are held there, to which thousands of votaries repair. It is the banyan tree that is alluded to in Paradise Lost when Adam and Eve

* * * * * * both together went
Into the thickest wood: when soon they choose
The Fig-tree; not that kind for fruit renowned,
But such as, at this day, to Indians known
In Malabar and Deccan, spreads her arms,
Branching so broad and long, that, in the ground,
The bended twigs take root, and daughters grow
About the mother tree, a pillared shade
High overarched and echoing walls between.
There, oft, the Indian herdsman shunning heat,
Shelters in cool, and tends his pasturing herds
At loop-holes cut through thickest shade: those leaves
They gathered, broad as Amazonian targe,
And, with what skill they had, together sewed,
To gird their waist.

The tree, however, is not, as Milton sang, remarkable for the broadness of its leaf. The branches spread to a great extent, dropping their roots here and there, which, as soon as they reach the ground, rapidly increase in size till they become as large as, and similar to, the parent trunk. As the Banyan tree gets old, it breaks up into separate masses, the original trunk decaying, and the props becoming separate trunks of the different portions. The banyan hardly ever vegetates on the ground ; but its figs are eaten by birds, and the seeds deposited in the crowns of palms, where they grow, sending down roots that embrace and eventually kill the palm, which decays away ; the drops or aerial roots yield a heavy hard timber and, when well prepared by water seasoning, oiling, &c., are valued for tent poles, spars of small vessels, &c. The timber of the tree is not employed in India, but Mr. Rohde had used planks, sawn from large drops after they had been seasoned in water with advantage : for knife-boards it is excellent. In Ceylon, Mr. Mendis says, it is used for common furniture and house buildings. A white glutinous juice is extracted by incision, from which bird-lime is prepared, and it is applied to the mouth to relieve tooth-ache ; it is also considered a valuable application to the soles of the feet when cracked and inflamed. The bark is supposed by the Hindus to be a powerful tonic. The leaves are pinned together, to form platters, of which Brahmins and Hindus eat. Much lac is often to be collected from this tree.—*Drs. Roxb.*, iii, 539, *Riddell*, *O'Shaughnessy*, *J. L. Stewart*, *Hooker's Him. Journ., Vol. II., p.* 246, *Marsden's Hist. of Sumatra, p.* 160, *Mr. Mendis*, *Milton*, *Book of Trees*, *Voigt*, *Thwaites*, *Rohde's MSS.*, *Eng. Cyc.*

FICUS RELIGIOSA. *Roxb.* iii, 547.

Urostigma religiosum. *Gasp.*

Peepul. HIND.

Bo-gaha. SINGH.

Grows all over India and attains a large size. It grows wild in the Siwalik Hills up to 500 feet in Chumba, attaining there, a girth of 25 feet. Its timber is red-coloured, coarse, subject to the attacks of white ants and is not much used. In Jhullunder, it attains a great size, length of trunk to the first branch being 10 feet, and circumference 10 feet. Its wood is red, readily attacked by white ants, and fit for nothing but fuel. The tree affords great shade, and is held in veneration by buddhists, as under its shade, Sakya muni died, and a branch of that tree having been sent to Ceylon, about 200 years before the Christian era, was planted and is still growing there.—*Mr. Barnes' Kangra Settlement Report, para.* 157 ; *Roorkee Proceeding papers on Gwalior Timber, page* 34, *quoted by Lieut. Col. Lake, Commissioner, Jhullunder Division, Dr. J. L. Stewart.*

FICUS ROXBURGHII, *Wall.*

F. Macrophylla, *Roxb.* iii, 556.

Trimbal of Kangra.
Timbal ,,
Thoss ,,

Phedu or farú of Chamba.
Rumal of Kaghán.

A tree of Chittagong, Silhet, Nepaul and the Panjab, N. W. Himalaya lower hills. The fruit is sold in the bazaar of Simla, and has a pleasant flavour. The tree grows at a height of 5,000 feet.—*Roxb.* iii, 556, *Voigt*, 228, *Powell.*

FICUS VENOSA.

Pilkan. HIND.

Kahimmal of Salt Range.

Not uncommon : wild at low elevations in the Siwalik Hills.—*Powell.*

FICUS VIRENS.

Juvi manu. TEL.

The people use the wood for common purposes. It is well adapted for avenues, being a very ornamental tree constantly in leaf. There are many varieties, the smaller leafed seem to stand better than the banyan in exposed situations.—*Mr. Rohde's MSS.*

FILICIUM DECIPIENS, *Thw.* 59.

R. decipiens, *W. & A.*

Pteridophyllum decipiens, *Thwaites.*

Pihimbiya. SINGH.

A Ceylon tree, ornamental, wood well-known. This is noticed by Mr. Fergusson, under the two synonyms.—*Mr. Fergusson.*

FINOKI, JAP. A cypress tree, of Japan, which yields a light whitish wood, of a good substance, and does not absorb water.—*Thunb., Hist. Jap., Vol. I, p.* 118.

FISSICALYX ? *Bentham.*

Dalbergia Mooniana, *Thw.*

D. Lanceoaria, *Moon.*

Nœdun. SINGH.

Nandu wood. ANGLO-SINGH.

A large tree, wood dark-coloured, and valued for furniture ; now scarce and dear.—*Mr. Fergusson.*

FLACOURTIA CATAPHRACTA, *Roxb.*

Panayala. BENG.
Talisputri ,, HIND.
Paneeyala. ,,
Panayala. DUK.
Paniala. HIND.

Talishputri. MALEAL.
Talisha. SANS.
Talishapatri. TAM.
Talsapatri. TEL. BENG.

A tree of Assam, Monghyr and Nepaul. Fruit palatable and reckoned wholesome.—*Roxb.* iii, 834, *Voigt.*

FLACOURTIA MONTANA. *Gibson.*

Ram tambut. MAHR.

Uttuck. MAHR.

A tree common in forests above and below the Bombay ghats, but does not, in as far as Dr. Gibson had seen, extend inland. The wood is rather strong and close-grained, but the girth is never such as to render it sufficient for general purposes of carpentry or building. —*Dr. Gibson.*

FLACOURTIA RAMONTCHII, *L'Herit.*

Kan regu.

A small tree of Madagascar and of the western Ghats of the peninsula of India, wood hard and close-grained.—*Major Beddome.*

FLACOURTIA SAPIDA, *Roxb.; W. & A.; W. Ic.*

Boinchi. BENG.
Bincha. DUK.
Kukai. PANJ.
Kukoa. ,,
Kaku. ,,
Kangi. ,,
Kangu. PANJ.
Kandei. ,,
Oogoorassa. SINGH.
Pedda kanaregu. TEL.
Pedda canrew. ,,
Nakka neredu. ,,

A small-sized tree growing to an elevation of 1,500 to 3,000 feet in the central province of Ceylon; grows, also, in Peninsular India, on the Godavery, in Ganjam and Goomsur, where its extreme height is 15 feet, circumference 1 foot, and height from the ground to the intersection of the first branch, 5 feet; grows also in Bengal and northwards to Dehra Dhoon. It yields a very hard close-grained wood which does not warp, and is worthy of attention. This wood is burnt when libations are offered for a person who has died on an inauspicious day. It grows in the warm valleys of Kumaon, and its hard durable wood is much prized there. In the Panjab it grows up to 3,500 feet in the Salt Range and on the skirts of the Suliman Range. The timber there is small, but straight and close-grained, is used for combs and in turnery; and, when large enough, for ploughs.—*Roxb.* iii, 835. *Dr. J. L. Stewart, p.* 18, *Captains Beddome and Macdonald, Voigt.*

FLACOURTIA SEPIARIA, *Roxb.* iii, 835.

Sharáwani of Dera Ismail Khán.
Dajkar; jidkar of Salt Range.

Common all over India. Its thorny branches make good fences.—*Powell.*

FLUGGEA VIROSA, *Roxb.*

Phyllanthus virosus, *Roxb.* iii, 659.

Girk. PANJAB.
Bata. ,,
Girthan. HIND.
Vinuthi. PANJAB.
Perci pastawano. ,,

This small tree grows on the Salt Range, west of the Indus and on the Siwalik hills. Its wood is close-grained and strong, and used for making looms.—*Dr. J. L. Stewart, p.* 195, *Voigt,* 152.

FOTHERGILLIA INVOLUCRATA, *Falc.*

Po-kash. PANJAB.
Kilar of Pangi.
Paser or Paseri of Hazara.
Pishor of Kaghan.
Chob-i-pao. KASH.
Spilechu. PASHTU.
Sha. KANAWAR.

This small tree forms whole tracts of low jungles in Kashmir, and Mr. Vigne tells us that it grows, also, in Ladak, and is very common in the straths and mountain sides at the western end of Kashmir, growing at an elevation from 4,400 to 5,000 feet. In general form, it resembles a ground-ash or gigantic hazel, ten or twelve feet high, with branches about 2½ inches in diameter, and its fruit in clusters of small nuts. Its wood is very hard, resembling, but darker than, box. Messrs. Rudall and Rose formed the portion taken to England by Mr. Vigne, into a finely toned flute. It makes excellent tent pegs, and is used for in-door work. In Pangi and wherever it grows, it is used for the suspension twig-bridges, called Jhula.—*Vigne, Powell, Dr. J. L. Stewart.*

FRAXINUS, *Species.*

Siah Chob. PASHT.
Ash. ENG.

Its manna.
Shir Khist.

Masson mentions this with the above native name, as a great sized bush growing in the mountains north of Kabul and at 10,000 feet on the mountain Chahaltan. Dr. Stewart surmises it to be F. floribunda. It yields the officinal manna. Wood not mentioned.—*Dr. J. L. Stewart.*

FRAXINUS FLORIBUNDUS, *Wall.*

Sum. PANJAB.
Hum. ,,
Hamu. ,,
Siunu. ,,
Shunnu. ,,
Sunnu. PANJAB.
Shing. ,,
Ugai. ,,
Banaush. ,,

This handsome tree grows beyond the Indus and in the basins of the Panjab rivers at elevations of 4,000 to 8,500 feet, rising 120 feet high with 15 feet of girth. Its wood is excellent, possessing all the properties of the European ash. It is used for jampan poles, ploughs, platters, spinning wheels, and makes the best oars.—*Dr. J. L. Stewart, p.* 138.

FRAXINUS XANTHOXYLLOIDES, *Wall.*

F. Moorcroftiana, *Wall.*

Crab ash. ENG.
Nuch. PANJAB.
Hanuz. ,,
Shilli. ,,
Chijla. ,,
Chuj. ,,
Chum. ,,
Thum. PANJAB.
Siju. ,,
Butna. ,,
Sandal. ,,
Shangal. ,,
Shang. ,,

This small ash tree grows at from 3,500 to 9,000 feet in the river basins of the Panjab; and in Thibet at 12,000 feet, and on the Suliman range at 5,000 feet. It rarely exceeds 5 feet in girth and 25 feet high. Its wood is small, but hard, heavy and strong, and is used for handles of tools and for jampan poles.—*Dr. J. L. Stewart, p.* 139.

CSL

GALEDUPA ARBOREA.

Karunga ? HIND. ?
Kurmeja. ? ,,
Kenja. HIND. ?

A very common tree in Tenasserim and Pegu, more especially in the Prome district. The seed may be collected in any quantity, it is a large seed and an oil, "Karunga ka tel" is expressed from it, which is used in Bengal for burning, and medicinally as a liniment.—*Dr. McClelland.*

GALEDUPA TETRAPETALA. A common tree of Tenasserim and Burmah, more especially in the Prome district. Its seeds yield an oil for burning, and the flowers a fine red dye.—*Dr. McClelland.*

GALEX, *Species.*

Moh-ma-gah. BURM.

A tree of Moulmein. Used in common purposes of building.—*Cal. Cat. Ex.* 1862.

GAMBIER is extracted from the leaves of the Uncaria gambir, in Siak, Malacca and Bittang, inspissating by decoction, strained, suffered to cool and harden, and then cut into cakes of sizes or formed into balls. A composition of this extract is valuable as a preservative for timber. Dissolve three parts of gambier in twelve of dammar oil, over a slow fire. Then, stir in one part of lime, sprinkling it over the top, to prevent its coagulating and settling in a mass at the bottom. It must be well and quickly stirred. It should then be taken out of the cauldron and ground down like paint on a muller till it is smooth, and afterwards returned to the pot and heated. A little oil should be added to make it tractable, and the composition can then be laid over the material, with a common brush. As a protection against the teredo, black varnish or tar are substituted for dammar oil, omitting the grinding down which would not answer with tar.—*Journ. Ind. Arch., also Dr. Cleghorn's Report,* 1859-60, *para.* 13, *page* 7.

GANDHI, HIND. ? A tree of Chota Nagpore. Soft, white wood.—*Cal. Cat. Ex.* 1862.

GANARA WOOD.

Ganara kurra. TEL.

A timber of the Northern Circars. (*Note.*—This is evidently Albizzia odoratissima.)

GAN-GAN, BURM. In Amherst, odoratissima a very strong, tough, hard, crooked-grained, fibrous, red wood, which would be suitable for machinery or any purpose requiring the above properties.

GANJAM, Goomsur, and Kimedy Forests. A valuable list of their trees was received from Lieutenant (now Lt. Col.) Macdonald from Ganjam, and Lieut. (late Captain) Phillips sent a note on those of Kimedy. The Kimedy forests cover an area of 400 square miles, those of chief consequence and most accessible, lying on both banks of the Vumshadara river, above and below "Buttely," "Barsinghy," and Jeranghee ; Jeranghee, Giba, Cothoor, Jadoupully, and indeed the whole of the hilly tracts abound with fine trees, the only difficulty being their removal when cut. He particularly noticed a tree, the "Dhamono," or "*Kurkurra.*" Its extreme height is 39 feet. The circumference of its trunk is 3½ feet, and height from the ground to nearest branch, 18 feet. It furnishes a very long-grained tough wood, pliant and light. It is used for dhoolies, cots, buggy shafts, bandy wheels and poles, spear and axe handles, fishing rods and lance handles and other purposes where strength and elasticity are required. It seems to be Grewia elastica. In Capt. Macdonald's list of Ganjam and Goomsur woods, he mentioned that the forests in the northern portion of that district, although not to be compared in size or importance with those in some other parts of the Madras Presidency, are nevertheless somewhat extensive and contain many useful trees. The most important and accessible are situated in the talook of Goomsur and the zemindary of Bodogoda, both of which are watered by rivers which afford facilities for floating the timber down to the coast during the freshes. The jungles change their names every two or three miles, and a list of them would be so long that it seems sufficient to indicate in general terms the localities in which the largest and finest timber is procurable. In Goomsur, these are the Kookooloobah, Gullory, Ootoro-godoloto, Poorwagoodoloto, Juggurnauthprasaud, Kurcholy, Bhootapilly and Beerecota Mootahs. In Bodogoda there are three Mootahs below the Ghauts, the Coradakonna, Godo and Jagiree, all three of which are well wooded, but the first contains the largest forests. Above the ghauts, are the Mootahs of Jorraow, Gowdogotho, Morihano, Gokalopoor, Meerecote, Woddobah and Loha-gooddee, all abounding in timber, which remains uncut chiefly on account of the difficulty of transporting it. The same remark applies to the forests of Chokapaud and Poomaghur, two hill dependencies of Goomsur. In the former, the Cottarikiah, Woolingiah, Mettribiah and Koondopottro Mootahs contain forests which are of little use to any one except the inhabitants of the country—of these forests the largest are the Dodo-soroo, Dehenko-soroo, Jhoouda-soroo and Suboolodeyee. In the hill tracts under Poomaghur, for the same reason, but little use made of any of the forests with the exception of those in the Punchagodotolo Mootah which lies at the foot of the ghauts. Captain (now Lt. Col.) Macdonald adds, that Soorada talook is most extensively wooded and supplies large quantities of fire-wood. Bodogoda is a zemindary, and the forests belong to the zemindar, in whose name a variety of small taxes are levied on the products of the jungle. In the time of the Goomsur rajahs, it is said that the forests yielded a revenue of about Rupees 2,000 a year, the felling of timber was then systematically discouraged from motives of policy with a view to render the country less accessible to troops. Timber is cut at all times of the year, but most of it seems to be felled between January and May, these being the months during which the ryots are less occupied with their cultivation. Bamboos and other trees which have little or no heart-wood, are cut during the wane of the moon being, otherwise, it is said, liable to be attacked by insects, but there is no such belief with regard to the larger kinds of timber. There are however five days in each hindu month, which are supposed to be inauspicious, and on these no trees are felled. Large patches of jungle are constantly cleared for the purpose of being brought under cultivation, but the mango and date tree, are preserved, also, the koeto, the Bovadah (*Bauhinia*), Soondorogoodee, (*Rottleria*) the Solopo palm (*Caryota*) and the Mohollo (*Bassia*).—(*R. M. Macdonald, Asst. Agent., Asst. Agent's Office, Russellcondah, 4th Dec.* 1854)

Since these remarks were written, Dr. Cleghorn visited that tract of country, and, in Goomsur, he says, the principal jungles are Kukuluba, Gulleri, Jaggarnatprasad, &c., and the Sal is their most useful and most abundant tree. The Khonds in their destruction of the forests, carefully preserve fruit trees such as the mango, the date, Caryota urens or solopo, Bassia latifolia, (Mohollo) wood apple, bastard sago, elupi, Bauhinia (Bovada) and Rottleria tinctoria, (Sundosa gunda.) The jungles he said were then rapidly diminishing, the clearance being effected by fire. In his journey, he was able further to identify, and note in the first edition of this work, the names of several trees of which only the vernacular terms had been given, and he obligingly allowed me to correct my own copy, from his corrected one. Captain Macdonald's valuable list of timber trees, &c., with the names thus modified, are given here, and merit further attention.

Acacia arabica. Babolo.
Acacia catechu. Khoiro.
Acacia. Goubarea.
Acacia sirissa. Sirisso.
Alangium hexapetalum. Ankolo.
Ambaleta.
Averrhoa carambola? Koromonga.
Ægle marmelos. Bello.
Bambusa spinosa. Conta banso.
Bassia latifolia. Mohoollo.
Bauhinia. Ambhota.
Bauhinia vahlii. Shyalee.
Bauhinia variegata. Borodha.
Baujhonoo.
Baygoona.
Bodoka.
Behenta.
Beloo.
Bignonea suaveolens.? Patolee.
Bignonia chelonoides.? Pamphoonea.
Bolungee banso.
Bombax heptaphyllum. Bouro.
Bono koniaree.
Boroana.
Buchanania latifolia. Charo-Bhalleah.
Butea frondosa. Polaso.
Caryota urens. Solopo.
Careya arborea. Koombee.
Cassia, *sp.* Tanghany.
Cassia fistula. Soonaree.
Cæsalpinia sappan. Bokmo.
Cedrela toona. Mahalimbo.
Chochena.
Choonokolee.
Chorayegodee.
Choureeona.
Citrus aurantium. Naringhee.
Citrus medica? Ambelee toba.
Conocarpus latifolius. Dhoboo.
Cluytia spinosa. Korada.
Carissa carandas. Gotho.
Dalbergia sissoo. Sisoowa.
Dalosingha or Taloosinghee.
Dharonjo.
Dhimeree.
Dhobo Khoiro.
Dhoon.
Dhosora khendhoo.
Diospyros ebenum. Ebony, Kendhoo.
Elæocarpus. Poecchandea.
Erythrina Indica. Chalodhoua.
Eugenia jambolana. Jamo.
Eugenia acutangula.? Hinjolo.
Euphorbia tirucalli.? Lodhoka sijhoo.
Feronia elephantum. Koeto.
Ficus, *sp.* Baee dhimeree.
Ficus Indica. Boro.
Ficus t'siela. Joree.
Flacourtia sapida. Boincho.
Gardenia. Bahmonea.
Gardenia. Patanwa.
Gardenia. Pendra.
Garuga pinnata. Moee.
Ghoralanjea or Tentara.
Ghunteoh Patoolee.
Gmelina, *sp.* Gombhare, Gomidi.
Gondo polaso.
Gongosheolee. Dondeepoholo.
Gooroohado.
Gooroobolee.
Grewia tiliæfolia. Dhamono.
Grouhonee Kubatee.
Hadakonkalee.
Ixora. Tillakooroowan.
Jhoontiah.
Jonesia asoca.? Oshoko.
Jundamaree.
Kaloochia.
Khakodha.
Khookoondea.
Kodoro.
Kola sahajo.
Kolee Kouradea.
Kontabaolo.
Kopassea.
Kossaye.
Mangifera Indica. Ambo.
Melia azadirachta? Limbo.
Meresingha.
Mesua ferrea.? Nagishvoro.
Michelia champaca.? Konchona.
Mimusops kaki? Kheerokolee.
Minjharee or Paloodhona.
Moddoro goodee.
Modoroo toba.
Morinda tinctoria. Achoo.
Mosanea.
Nauclea cordifolia. Holondho.
Nauclea cadamba.? Kodumbo.
Nauclea parviflora. Moondomonde.
Neraso.
Nerium odoratum.? Goonaicho.
Nooniaree, Looniaree or Noonononea.
Oshrosto.
Panceollo.
Pentaptera glabra. Sahajo.
Phasee.
Phyllanthus emblica? Emblic myrobalan. Olla awla.
Phyllanthus emblica.? Gondhona.
Pichoolee.
Pitta Kaloochia.
Pitolo.
Pochoboro.
Ponaso.
Pongamia glabra. Korunjo.
Ponposo Komaree.
Porto koorwan.
Potoobaolo.
Pterocarpus marsupium. Piasalo.
Rahana.
Rayee.
Rooradea.
Rottleria tinctoria. Soondoro-goondee, Koomala-goondee, or Bosonto-goondee.
Salora.
Schleichera trijuga. Koossoomo.
Semecarpus anacardium.
Shalimbo-banso.
Shorea robusta. Salwa or Sorunghee.
Siddha.
Sohn, one of the Terebinthaceæ.
Soogondhee.
Sohojo Maree.
Soondorogoyan banso.
Soroopottree Moee.
Spondias mangifera. Ambodha.
Sterculia sp. (not fœtida) Kodalo.
Strychnos nux vomica. Korra.
Strychnos potatorum. Kotoko.
Swietenia chloroxylon. Satinwood, Bhayroo.
Tentoolee or Koyan.
Terminalia. Kosee.
Terminalia alata. T. glabra. Orjoono.
Terminalia belerica. Bahadha.
Terminalia chebula. Koredha.
Trophis aspera. Sahadha.
Vangueria spinosa? Mohonea.
Woon.
Wrightia. Beejee Kooroowan.
Zizyphus. Borokolee.
Zizyphus. Contayecoolee.

—*Captains Phillips and Macdonald, Dr. Cleghorn.*

GARANIA SPECIOSA?

Balawa. Burm.?

A tree of Moulmein. Used in common purposes of building.—*Cal. Cat. Ex.* 1862.

GARCINIA. A genus of plants, trees of considerable size, consisting of about

21 species, growing in Ceylon, Travancore, Malabar, and other parts of the peninsula of India, in Sylhet, Assam, the Malay peninsula, and the southern parts of China. Several of them yield edible fruits, and one of them is the Mangosteen fruit tree, *G. Mangostana*, L., a tree of the Malay peninsula and islands of the Moluccas: *G. Kydia*, Roxb., of the Andaman islands, is a tree, with a sharp but agreeably acid fruit, similar to the large fruit of *G. pedunculata*, Roxb., which grows in Rungpore: *G. paniculata*, Roxb., a tree of Sylhet, has a palatable fruit, something like the mangosteen: *G. Roxburghii*, Wight, a tree of Travancore, Malabar and Chittagong, has an edible but very acid fruit: *G. purpurea*, Roxb., grows on the western coast of peninsular India. Useful timbers are obtained from others, but the species are not defined. —*Ainslie, Voigt. Thwaites, Dr. Mason, Useful Plants, Eng. Cyc.*

GARCINIA, *Species.*

Young zalai. BURM.

A tree of Moulmein. Its wood is made use of for ordinary house-building purposes. Fruit edible.—*Cal. Cat. Ex.* 1862.

GARCINIA, *Species.*

Parawah. BURM.

A tree of Akyab, but not plentiful. A large wood, used to make bows and in house-building.—*Cal. Cat. Ex.* 1862.

GARCINIA, *Species.*

Parawah. BURM.

In Pegu, a strong wood with a pretty variegated grain, the tree is of too small size to render the timber available for general purposes.—*Major Benson.*

GARCINIA, *Species.* A timber tree of Tenasserim, the largest that Dr. Mason had seen of the genus. In frequent demand for house posts in Tavoy.—*Dr. Mason.*

GARCINIA, *Species.*

Pulloua. BURM.

A large tree of Tavoy, used for posts, &c. (*Note.*—Are the last four all one species ?)

GARCINIA CAMBOGIA, *Desrous.*, not *Roxb.*

Garcinia Kydia, *W. & A.* ? | Garcinia Indica, *Choisy.*

Wontay. CAN.
Valaitie amlie. DUK.
Kutka pulie. MALEAL. ?
Racta shrava. SANT.
Gorakah-gass. SINGH.
Karka-pulie maram ? TAM.
Woda chinta chettu ? TEL.

A tall tree, growing in Ceylon up to 1,500 feet, grows in Travancore and in the forests of Malabar, is very abundant in Tennasserim, and very common in Siam and Cambodia. Wood used but not good. It yields a pleasant tasted acid fruit.—*Eng. Cyc., Drs. Ainslie, & Mason, Messrs. Thawaites, & Fergusson.*

GARCINIA CORNEA, *Linn.* A small tree of Moulmein, Penang and Amboyna, with a tall though not very thick trunk. The wood is heavy though not very hard, like horn, and is used for the handles of tools. The young trees are used also for house-building purposes, but the timber of old trees is too hard to work. The fruit has a resinous smell.—*Roxb.* ii, 229, *Dr. O'Shaughnessy, Eng. Cyc.*

GARCINIA ECHINOARPA, *Thw.*

Madolgas, SINGH.

A large tree of the Central and Southern Provinces of Ceylon; wood soft.—*Mr. Fergusson.*

GARCINIA ? GLUTINIFERA, *Ainslie.*

Panichekai maram. TAM.

Dr. Wight says this is one of the very few trees admitted into his list, that he had not himself seen and verified, and it was introduced in the hope that some resident on the Malabar Coast would favor him with specimens to determine its name and botanical relations. Dr. Gibson believes that a Diospyros must be here meant, but thinks it may be that the Bombay Garcinia sylvestris is alluded to. If so, the tree, he says, is common in the southern Konkun, Malabar and Canara; always planted; affording a good wood and palatable fruit, from the kernel whereof is extracted, by boiling, the vegetable concrete oil "kokum." The dried fruit is a common ingredient in native cookery, having an agreeable acid.—*Drs. Wight and Gibson.*

GARCINIA GUTTA, *R. W.*

Cambogia gutta, *Linn.*
Hebradendron cambojioides, *Graham.*

A tree, native of Ceylon, not uncommon about Colombo, and generally on the South West Coast of the Island. Produces a kind of gamboge.—*Wight's Illustrs. I.* 126.

GARCINIA MORELLA, *Desr.*

Gokatu, Gothatu, SINGH. | Kana-Goraka, SINGH.

This grows from Colombo to Batticaloa, and is the only tree in Ceylon that produces gamboge.—*Mr. Fergusson.*

GARCINIA ROXBURGHII, *R. W.*

G. Cambogia, *Roxb.*, not *Desr.*
G. Zeylanica, *Roxb.*
G. Affinis, *W. & A.*
G. Cowa, *Roxb.*

Toung-tha-lay. BURM. | Cowa. HIND.

A tree of Ceylon, Travancore, Malabar, Chittagong, and scattered over the hills of British Burmah, but scarce. Wood not used, but is yellow and fit for a fancy wood. A cubic foot weighs lbs. 42. In a full-grown tree on good soil the average length of the trunk to the first branch is 20 feet, and average girth measured at 6 feet from the ground, is [illegible]ect. Fruit eatable, but very acid.—*Drs. Brandis and McClelland, Cal. Cat. Ex. of* 1862, *Voigt, Wight's Illust., I, p.* 125.

GARDENIA, *Species.*

Telega. TEL.

A tree of the Godavery forests and Dekhan, furnishes a very hard wood, which would be very good for turning.

GARDENIA CORONARIA, *Buch.*

G. costata, *Roxb.*
Yin-gat. BURM.

A tree of Chittagong and Moulmein. Wood has a fragrant smell, is used for building purposes and would be useful for boxes, but unfortunately, when cut into planks there are so many flaws and cracks, that it is difficult to procure a piece of any size; it is a strong tough wood and useful for turning. Fruit edible.—*Voigt, Cal. Cat. Ex.* 1862, *Major Benson.*

GARDENIA FLORIBUNDA ?

Thet-ya. BURM.

The plant which bears this botanical name is only a shrub, but in the Cal. Cat. Ex. of 1862, it was described as tree of Moulmein, and its wood as made use of for ordinary house-building purposes.—*Cal. Cat. Ex.* 1862. *Beddome in literis.*

GARDENIA ENNEANDRA, *Kön.; W. & A.*

Gardenia latifolia, *Roxb.; Cor. pl.*
Bikki. TEL.

A small tree of peninsular India, growing in the Carnatic, the Nalla Mallai, the Circars, Khandesh and Guzerat. It furnishes a light wood of little use. Native combs are made of it. Its very large fragrant flowers are white in the morning and yellow at night.—*Roxb.* i, 706, *Voigt, Mr. Latham.*

GARDENIA GUMMIFERA, *Linn.; Roxb.; W. & A.; W. Ic.*

Gardenia arborea, *Roxb.* i, 706.

Chiri bikki. TEL.
Chatta matta. ,,
Garaga. TEL.

A large shrub or small tree, with large fragrant flowers, which, in the morning, are white and become yellow by the evening. The wood is hard, and a beautiful yellow resin exudes from the bark. The natives eat the fruit. It grows in Ceylon, in the Gingi hills, on the Godavery and in the Circars, and is very common about Duddi, on the Gutpurba river.—*Roxb.* i, 709, *Voigt, Captain Beddome, Mr. R. Brown.*

GARDENIA LATIFOLIA, *Ait.*

Papura. HIND.
Gallis gas. SINGH.
Lakada tarana. ,,
Kumbay maram. TAM.
Bikki. TEL.
Konda manga. TEL.
Kakkiti chettu. TEL.
Karinguva. ,,
Kokkita. ,,
Kurukiti. ,,
Poda karinga. ,,

A small tree of Ceylon, in the south of the peninsula of India; also a Godavery tree growing on the Gutpurba: wood close-grained, and promises well for turning, nearly equal to box: flowers similar to G. enneandra.—*Voigt p.* 378, *Captain Beddome, Mr. Fergusson.*

GARDENIA LUCIDA, *Roxb.; W. & A.*

Gardenia resinifera, *Roth.*

Tsay-tham-by-ah. BURM.
Dikamalli. DUK. GUZ. HIND.
Cumbi. TAM.
China karinguva. TEL.
Tella manga. TEL.
Its resin.
Dikamalli. HIND.
Kambo pisin. TAM.

Grows in the southern Mahratta country, Circars, on the Godavery and in Chittagong, and gives a close-grained wood, well adapted for the lathe. In British Burmah, it is a white close-grained wood apparently well adapted for turning. This wood like that of several other species of Gardenia and Randia is used for making combs. A cubic foot weighs lbs. 49. In a full-grown tree on good soil the average length of the trunk to the first branch is 15 feet, and average girth measured at 6 feet from the ground, is 3 feet. It furnishes a strong disagreeable smelling gumresin; procurable in most Indian bazars, and much used by native doctors, when dissolved in spirits, as an external application, for cleaning foul ulcers. It is now used by some European practitioners in cases of worms in children.—*Roxb.* i, 707, *Faulkner, Voigt, Dr. Brandis, Captain Beddome.*

GARDENIA MONTANA, is common in the coast and inland jungles of Bombay, and may be recognized by its straight stem, long stout thorns, and general absence of leaves. The wood is hard, but always small, never squaring to more than 3 inches.—*Dr. Gibson.*

GARDENIA TETRASPERMA.

Kurkuni, Hazara.
Tulikukar, ,,
Bandaru, putkanda, dáru, bákshí of Kangra.
Jirndu of Ráví.
Bisindidi of Chenab.

A tree of several parts of the Panjab.

GARDENIA TURGIDA, *Roxb.*

Nunjoonda maram. TAM.

Dr. Wight says, he only knew this from small specimens, and was unable to say whether it is a tree or shrub, but believed the former; the wood which is hard and close-grained, is useful in cases where small timber will serve. Dr. Gibson asks if Wight's Gardenia turgida be not G. montana (?) and adds, "I do not recognize this species or variety; neither do I find it noticed in Dr. Wight's Prodromus. If it be our Gardenia montana, the tree is rather common in the coast and inland jungles. It may be recognized by its straight stem, long stout thorns, and general absence of leaves. The wood is hard, but always small, never squaring to more than 3 inches." The

GSL

Gardenia turgida of Roxburgh is a tree of Bhootan, both it and G. montana are in Wight's Icones, ii. t. 577 & 579.—*Drs. Wight and Gibson.*

GARUGA PINNATA, *Roxb.*

Khyong-youk.	BURM.	Khar pat.	PANJAB.
Kuruk.	HIND.	Carri vembu maram.	TAM.
Kooruk.	MAHR.	Garuga chettu.	TEL.

This tree is not uncommon among the lower Siwalik hills, some distance west of the Jumna. It grows in Bhabur forests along with Odina wodier. Rises in Kumaon to 20 or 30 feet, with a clear trunk of 12 or 15 feet, and 3 or 4 feet in girth. Timber used in house-building, and is tolerably durable. The foliage is used as fodder. Its bark exudes a gum, aromatic, and valued as a mucilage. In Coimbatore this is a considerable sized tree with a round umbrageous head. It is common in the Bombay jungles, where the wood appears of little value; but might be creosoted. The tree is rather common in the plains and on the hills of British Burmah, but the wood is not much used. A cubic foot weighs lbs. 52. In a full-grown tree on good soil the average length of the trunk to the first branch is 40 feet, and average girth measured at 6 feet from the ground, is 9 feet. It sells in Pegu, at 8 annas per cubic foot.—*Drs. Wight, Gibson, Brandis and J. L. Stewart. Cal. Cat. Ex.* 1862, *Mr. R. Thompson.*

GELONIUM BIFARIUM, *Roxb.*

Hsai than bayah. BURM.

Is found in the Rangoon district, it seldom exceeds three feet in girth, and is only fit for house posts. Wood, white colour.—*Roxb.* iii, 830, *Voigt* 158, *Dr. McClelland.*

GELONIUM LANCEOLATUM, *Willd.* Common in Ceylon up to 4,000 feet. Wood white, and adapted for house-building.—*Roxb.* iii, 831, *Voigt* 158, *Dr. McClelland, Mr. Fergusson.*

GHANTHA WOOD, ANGLO-TEL.

Gantha karra. TEL.

A wood of the Northern Circars.

GHATNA, HIND.? A tree of Chota Nagpore. Hard, yellow timber.—*Cal. Cat. Ex.* 1862.

GHORALANJEA, *Uria.*

Tentara, URIA.

A tree of Ganjam and Goomsur, extreme height 30 feet. Circumference 3 feet, and height from the ground to the intersection of the first branch, 10 feet. Used for spinning wheels, sugar presses and plough-shares, and is burnt for firewood, being tolerably common. —*Captain Macdonald.*

GHUNTEOH PATOOLEE, URIA? A tree of Ganjam and Goomsur, extreme height 22 feet. Circumference 1½ feet, and height from ground to the intersection of the first branch, 10 feet. Used occasionally for axle-trees and rafters, but chiefly for firewood, the tree being rather common.—*Captain Macdonald.*

GIRNAH. A thorny shrub of Jhullundur in the Panjab, bearing a small black edible fruit; native combs are made from the wood, which is also used in fences. The wood of a very old tree turns quite black and acquires a strong fragrance, and is considered as a valuable medicine, and sold at a high price under the name of "Uggur;" goats and sheep eat the leaves.—*Lieut. Colonel Lake, Commissioner, Jhullundur Division.*

GIRONNIERA SUBÆQUALIS, *Planch.* A moderate-sized Ceylon tree not uncommon in the Central Province up to 4,000 feet. —*Mr. Fergusson.*

GIRONNIERA RETICULATA, *Thw.* A tree of Ceylon, at Badulla, and up to 3,000 feet, growing about 40 feet high. Both these are likely to produce useful timber.—*Mr. Fergusson.*

GIVOTTIA ROTTLERIFORMIS, *Griff.*; *W. Ic.*

Putalli maram.	TAM.	Tella ponuku.	TEL
Butalli ,,	,,	,, Poonkee.	,,

One of the Euphorbiaceæ, common in Southern India. Dr. Wight had not learned anything regarding the timber, one carpenter in Coimbatore spoke disparagingly of it, but he did not consider him a trustworthy authority. It is found in the Circar hills, and is, there, a very light soft wood. Found also in a very few of the Bombay jungles, but in these only inland above the ghats. Not seen in Guzerat. The wood is light, and is used only for making the figures and models manufactured at Gokak, in the Southern Mahratta country.—*Drs. Wight and Gibson, Captain Beddome.*

GLAM? A tree of Singapore, furnishes a paper-like bark, used in caulking the seams of vessels.

GLEDITSCHIA TRIACANTHOS. A fine thorny tree, introduced into the Panjab by the Agri-Horticultural Society. Wood hard and dark.—*Powell.*

GLOCHIDION, *Thwaites.* A genus of small trees, of which Thwaites mentions G. coriaceum; G. Gardneri; G. Jussieuianum; G. montanum; G. nemorale; and G. Zeylanicum, in Ceylon; several others are enumerated by Drs. Roxburgh and Wight, as trees of Peninsular India and Penang, viz., hirsutum, lanceolarium, multiloculare, nitidum, pennatum and sinicum. Of their woods nothing is known.

GMELINA, *Species.*

Cumba wood. ANGLO-TEL. | Cumba karra. TEL.

A tree of the Northern Circars.

GMELINA, *Species.*

Gombharee. URIA.

A tree of Ganjam and Goomsur; extreme height 50 feet: circumference 4½ feet: height from the ground to the intersection of the first branch, 18 feet. A white light wood. Boxes, chairs, bed-posts, lamp-stands, bullock-yokes, bazaar-measures, toys and other articles are made of it. It is said to be rather scarce and expensive. The bark is said to be used medicinally.—*Captain Macdonald.*

GMELINA ARBOREA, *Roxb.: Cor. Pl. W. Ic.*

Gmelina Rheedii, *Hooker, Bot. Mag.*

Gumar. BENG. HIND.
Gumber. ,,
Gumbari. ,,
Yemaneh. BURM.
Kyunboe? ,,
Yamana. ,,
Sewun. DUK.
Jugani-chukur. HIND.
Seevum. ,,
Seevun. ,,
Shewun. MAHR.
Seevun. ,,
Kumbulu. MALEAL.

Kumhar. PANJ.
Gumhar. ,,
Kako-dumbari.
At-demmata. SINGH.
Gombhari? SANS.
Ghooteky. ,,
Cummi maram? TAM.
Gumudi maram. ,,
Teggu muda. TEL.
Gummudi chettu. ,,
Gumudu-teku. ,,
Pedda gumudu. ,,
Goomer tek. ,,

This large tree grows wild in the eastern Siwalik range. It is found sparsely in Kumaon in moist localities; timber, there, light, elastic, and tough, used for frames of native drums, and moderately durable. Its wood is extensively used at the Nagpore Arsenal for Enfield rifle stocks, fruit eaten largely by natives, but unpalatable. It grows in Coimbatore, is rather frequent on the Malabar Coast, grows in the Godavery forests: is not very common on the Bombay side, where it is found more in the forests below the ghats than inland. It grows in Ceylon, where it is common, up to an elevation of 5,000 feet. It grows in Burmah and is plentiful in the Pegu and Toungheo forests, and it is there a large tree with white, light wood, used for house posts, planks and for carving images. Recommended for planking and furniture. A cubic foot weighs 35 lbs. In a full-grown tree, there, on good soil, the average length of the trunk to the first branch is 50 feet, and average girth measured at 6 feet from the ground, is 12 feet. Dr. McClelland calls it "Kyoonboe," *Burm.*, a yellow wood, and says it is plentiful in the Pegu and Tounghoo forests, is a large and remarkably strong tough timber, and fit for fancy wood, but this does not seem to be the wood of G. arborea. In Moulmein, its wood is used as an ordinary building material. Fruit used as medicine. On the Bombay side, the wood is in much esteem for carriage panels, and other purposes. According to Dr. Roxburgh, it also stands exposure to weather and water well. From its great size, straightness and general spaciousness in appearance (being a beautiful flowering tree), this is one of the most desirable for propagation throughout the country. Dr. Cleghorn in the Jury Reports says it is a large timber tree, growing in the mountainous districts: that the wood is light, of a pale-yellow colour, easily worked, and does not shrink or warp; used for picture frames, decking small boats, for making venetian blinds, sounding boards, palankeen panels, gram measures, &c. It is very commonly used in the Vizagapatam district, for the foundation of wells and other purposes, which require it to be submerged in water, where it is remarkably durable. On the Godavery, the large trees of this yield a very hard durable wood, and the yokes for bullocks are made from it. In Nagpore, the "Seevum" is of a very light colour, has a sort of netted grain, is free from faults, and altogether may be considered a very excellent timber, although unfortunately not procurable in large quantities. Its length, there, is from 13 to 18 feet and from 4½ to 3½ feet in girth. The Commissariat there, supply it to the Ordnance Department for making packing cases, &c., and the natives employ it in the construction of palkies. It takes varnish well, and works up nicely into furniture, but is attacked readily by white-ants. From the small scantling of that which is there obtained, it must be classed merely as a rafter wood.—*Roxb.* iii. 84, *Drs. Wight, Gibson, Brandis, Cleghorn, Stewart, Captains Sankey and Beddome, Cal. Cat. Ex. of* 1862, *Thwaites, W. Jacobs, Esq., R. Thompson, Esq.*

GNEMIUM GNETUM, *Linn.*

Wagoo. JAV. | Bagu. MALAY.

This tree abounds on the southern coast of the island of Sumatra where its bark is beaten, like hemp, and the twine manufactured from it is employed in the construction of large fishing-nets. The coarse cordage from the bark is in extensive use throughout the Archipelago. The leaves are dressed in curries.—*Crawfurd's Dictionary, page* 26, *Marsden's Hist. of Sumatra, p.* 91.

GOAY-PIN-GYEE, BURM. A tree of Moulmein. Used in common purposes of building: its seed is used for weights in weighing gold.—*Cal. Cat. Ex.* 1862.

GOAY THA, BURM. A tree of Moulmein. Used in common purposes of building.—*Cal. Cat. Ex.* 1862.

GODDA, CAN.? A Mysore tree, one of the Cedrelaceæ, has a wood that polishes well, and is good for turning.—*Captain Puckle in Mad. Cat. Ex.* 1862.

GOMPHIA ANGUSTIFOLIA, *Vahl.*; *W. & A.*, *Prod.*, *I*, 152.

Walkera serrata, *Willd.*; *DC. Prod.*
Ochna Zeylanica, *Lam.*
Gomphia Zeylanica, *DC*
" Malabarica, *DC.*

Bokaara-gass. SINGH.

Grows in Ceylon where it is common up to an elevation of 3,000 feet, and grows to the height of thirty feet. The wood is useful for building purposes.—*Thw. En. Pl. Zeyl.*, *I*, *p.* 71.

GOMUTO, MALAY.

Makse. AMB.
Gomuti. ENG.
Duke. JAV.
Dok. "
Iju. MALAY.
Eju. "
Si ji. MALAY.
Sagwire. PORT.
Anow. SUM.
Cabo nego. SP.
Seho. TER.

A fibrous product of the Arenga saccharifera. It is a tree of the Eastern Archipelago but grows in Bangalore and to some extent in the Nuggur division of Mysore.

GONDOPOLA, URIA? A tree of Ganjam and Goomsur; extreme height 45 feet, circumference 2½ feet, and height from the ground to the intersection of the first branch, 8 feet. Bandy-wheels and plough-shares are occasionally made of this wood, but it is chiefly burnt for fire-wood, being tolerably common.—*Captain Macdonald.*

GONGOO OR GANGAW, BURM. A tree of Amherst, Tavoy and Mergui; maximum girth 3 cubits, maximum length 32 feet. Found very abundant near Mergui, also thence along coast as far as Amherst. When seasoned, it floats in water. It is used for tables, chairs and miscellaneous articles by the Burmese; a good, hard, tough wood, durable and recommended for helves, also for handles of all kinds of tools.—*Major Simpson's Report*—*Captain Dance.*

GONGOSHEOLEE, URIA.? Dondeepoholo, URIA? A tree of Ganjam and Goomsur; extreme height 25 feet, circumference 3 feet, and height from ground to the intersection of the first branch, 7 feet. No use seems to be made of the wood. The flower which has a powerful perfume is offered in all the pagodas to the presiding divinity.—*Captain Macdonald.*

GONIOTHALAMUS HOOKERI, *Thw.* A middle-sized tree of Ceylon at Hinidoon and Reigam Corles, at an elevation of about 1,000 feet.—*Thw. En. Pl. Zeyl.*, *p.* 6.

GOOROOHADO, URIA? A tree of Ganjam and Goomsur; extreme height 22 feet, circumference 2 feet, height from ground to the intersection of the first branch, 10 feet. Chiefly used for firewood though rafters are occasionally made of this wood.—*Captain Macdonald.*

GORDONIA, *Species.*

Anan pho. BURM.

A tree of Moulmein. A strong wood, good for building purposes.—*Cal. Cat. Ex.* 1862.

GORDONIA, *Species.*

Zaza. BURM.

A large common timber tree of Martaban.

GORDONIA FLORIBUNDA AND G. INTEGRIFOLIA: the former grows in Martaban, Chappadoug and Tavoy, and is called "itch wood" by the Tavoyers, from the itching that its chip or bark occasions when brought in contact with the skin. Dr. Mason had often seen its compact timber used for house-posts and for rice-mortars. Gordonia obtusa, *Wall.*, and G. integrifolia *Roxb.*, are trees of the Khassya hills and Tenasserim.—*Voigt* p. 91, *Roxb.* ii, 575, *Dr. Mason's Tenasserim.*

GORDONIA SPECIOSA, *Thw.*

Carria speciosa, *Gardn.*

A large tree, 40 to 50 feet high, rather uncommon, in damp forests of the central province of Ceylon at an elevation of 5,000 feet and upwards.—*Thw. En. Pl. Zeyl.*, *I*, *page* 40.

GORDONIA ZEYLANICA, *Wight.*

Var. *a.* lanceolata.
Var. *b.* elliptica.

Grows in forests of the central province of Ceylon, at an elevation of 4,000 to 7,000 feet.—*Thw. En. Pl. Zeyl.*, *I.*, *p.* 40.

GREWIA, a genus of plants belonging to the natural order Tiliaceæ, of which many species grow in South Eastern Asia; they are mostly shrubs or small trees, the fruits, fibres and timbers of which are applicable for economic purposes. The inner bark of *G. oppositifolia*, Buch., a small tree, is used in the Himalaya, for coarse cloth and cordage. The acid berries of *G. sclerophylla*, Roxb., a shrub, are used for making sherbet, as are, also, the berries of *G. Asiatica*, Linn. *G. ulmifolia*, is a tree of Assam and China.—*Eng. Cyc.*, *Roxb*, ii, 591. *Voigt* 128.

GREWIA, *Species.* At Tavoy, when vessels require spars they are usually furnished from a small tree belonging to this genus which grows on the seaboard.—*Dr. Mason's Tenasserim.*

GREWIA, *Species.*

Maiva. BURM.

A Tavoy wood.

GSL

GREWIA, *Species.*

Tha-ran. BURM.

A tree of Moulmein. Wood used to make dancing dolls.—*Cal. Cat. Ex.* 1862.

GREWIA ASIATICA, *Linn.*

Phulsa. BENG. Fulsa. HIND.	Fulsa maram. TAM.

Grows in the peninsula of India, in Bengal, and in Pegu, is a large tree like *G. floribunda*, but not so plentiful. Grows wild in the Kangra hills, and is cultivated in the plains. Wood white colour and adapted for every purpose of house-building. The acid berries are palatable, and much used to make sherbet as a cooling drink.—*Roxb.* ii, 586, *Dr. McClelland, Dr. J. L. Stewart, page* 26, *Mr. Powell.*

GREWIA BETULÆFOLIA. *Juss.*

Shikari mewa of Kohat.		Kanger,	Salt Range.
Khircha,	Pusht.	Gangi,	,,
Ind[illegible]	,,	Ganger,	,,
Inzarre,	,,		

A small shrub : common, wild, in lower hills, of the Panjab.—*Dr. Stewart.*

GREWIA ELASTICA, *Royle.*

Dhamnoo. HIND. Farri. PANJAB.	Dhamman. PANJAB.

This is figured in Royle's Himalayan Botany. It grows in the Salt Range and in the Sewalik tract below Kangra, and the timber there, is said to be very strong and elastic. It grows to a large size in Kumaon, but the hill-men never use it, though the wood is tough, elastic, and admirably adapted for buggy shafts, helves, handles and boxes.—*Eng. Cyc. Dr. J. Stewart and Mr. R. Thompson.* (*Note.*—Is this the Dhamono of Kimedy and of Ganjam and Goomsur ? *q. v.*)

GREWIA FLORIBUNDA, *Wall.*

Myat ya. BURM.	Mya ya gyee. BURM.

A very common tree, throughout the Rangoon, Pegu and Tounghoo districts, but scarce in the Prome and Tharawaddy districts. It is a good serviceable timber for all ordinary purposes of house-building. The bark affords a coarse strong fibre, not much employed, however, by the Burmese.—*Dr. McClelland, Cal. Cat. Ex.* 1862.

GREWIA HOOKERII, *McClelland.*

Phet woon. BURM.

Very plentiful in Pegu. It attains a girth of about 3 to 4 feet, and grows up tall and remarkably straight. It is found with teak in the forests of Pegu and Tounghoo. Wood white-coloured and adapted for every purpose of house-building.—*Dr. McClelland.*

GREWIA MICROCOS, *Linn. W. Ill.*

Mya ya BURM.

A common tree of the Peninsula of India found on elevated ground of British Burmah. Wood not used. A cubic foot weighs lbs. 51. In a full-grown tree on good soil the average length of the trunk to the first branch is 10 feet, and average girth measured at 6 feet from the ground, is 4 feet.—*Dr. Brandis, Cal. Cat. Ex.* 1862.

GREWIA OBLIQUA.

Darsook mara. CAN.	Damun. MAHR.

A tree of Canara and Sunda, found mostly below, seldom grows large. Wood used in agriculture, house posts, &c.—*Dr. Gibson.*

GREWIA OPPOSITIFOLIA, *Buch.*

Thamman.	PANJAB.	Biul.	HIND.
Dhamman.	,,	Bahul.	,,
Dhamnu.	,,	Behul.	,,
Pastuwanna.	,,		

Grows in the Kheree pass, in the Deyhradoon ; is common in all the lower hills of the Panjab, in the Cis and Trans-Indus and in the Salt Range up to 4,500 or 5,000 feet. The wood is tough and elastic, and is valued for handles, shafts, banghy sticks, the ring for the rope in the single rope-bridge ; and, according to Vigne, for boxes. According to Dr. Royle, the inner part of this tree is used for cordage and for making a coarse cloth. Mr. Powell says the bark yields a fibre for ropes, and the wood emits an offensive odour when burning. He adds that G. elastica and G. oppositifolia are frequently confounded.—*Roxb.* ii, 583, *Dr. J. L. Stewart, Powell's Hand-book, Voigt,* 128.

GREWIA PANICULATA, *Roxb. ?*

Microcos tomentosa, *Sm.*	Hunu-kirille. SINGH.

A tree, according to Mr. Mendis, of the southern province of Ceylon, where its wood is used in house-building. A cubic foot weighs 44 lbs., and it is esteemed to last 25 years. But Voigt calls it a shrub, and it is possible that Mr. Mendis' botanical name requires attention.

GREWIA ROTHII. *D.C.*

Bather.	PANJAB.	Jana.	TEL.
Nekki Bekkar.	,,		

Said to be a tree of the Cuddapah Nalla Mallai yielding a light, ash-coloured wood, with a straight grain, hard and strong, is much used and very serviceable. Wood very hard and much used in the Circars. Powell describes this as a small shrub of the Lower Siwalik Hills. Dr. Stewart merely names it.—*Capt. Beddome, Messrs. Latham and Powell, Dr. J. L. Stewart.*

GREWIA SALVIFOLIA ? A tree of the Madras provinces, its wood makes good walking sticks.—*M. E. J. R.*

GREWIA SPECTABILIS ?

Phet-woon. BURM.

The trees are found with teak in the forests of Pegu and Tounghoo. Very plentiful ; attain a girth of about three to four feet and grow up tall and remarkably straight. Wood white colour and adapted for every purpose of house-building.—*Dr. McClelland.*

GREWIA TILIÆFOLIA, *Vahl.*, *W. Ic.*

G. arborea, *Roxb. in E. I. C. Mus.*
G. variabilis, *Wall.*

Damun. MAHR.	Tharra. TEL.
Dawaniya. SINGH.	Dhamono. URIA ?
Chadachy maram. TAM.	Dhamono. ,,
Sadachoo ,, ,,	Karkana. ,,
Talathi ,, ,,	

In Coimbatore, a considerable tree, the wood of which is soft and easily worked : It is useful for inferior building and common purposes. It is a common forest tree in the Bombay coast jungles ; rare inland, and there the wood is not deemed of any value for household purposes, agricultural instruments, or cabinet work. It is said to grow to a very large size on the mountains of the Circars, and to be there a valuable timber, much used for handles of axles, pellet bows, cowars and walking sticks. In Ganjam and Goomsur, the Dhamono (Grewia tiliæfolia) is of extreme height 35 feet, circumference 3 feet, height from ground to the intersection of the first branch, 20 feet. It is used for cot-frames and bandy wheels ; the handles of axes, knives, spears, mamoties, pickaxes and carpenters' tools are made of this wood, which is also burnt for firewood, being tolerably plentiful. The bark gives a strong rope.

(*Note.* I have many notes of a tree or trees to which this botanical name is given, and it would seem that the timbers of two or three distinct trees have been brought for examination. Lieut. Doveton of the Central Provinces says Gmelina arborea has been mistaken for Grewia tiliæfolia.)—*Lieutenant-Col. Lake, Commissioner, Jhullundhur Division, Major Pearson, C. P., Lieut. Doveton, Drs. Wight and Gibson, Captains Beddome and Macdonald.*

GRIFFITHIA GARDNERI, *Thw.*

Atakœtiya. SINGH.

A small handsome flowering tree, produces an ordinary timber.—*Mr. Fergusson.*

GRISLEA TOMENTOSA, *Roxb.*

Tau. PANJAB.	Dahai. PANJAB.
Tawi. ,,	Dha. ,,

Grows in most parts of the south-east of Asia and in the Siwalik and Salt Range up to 4,000 feet. Wood small, used for fuel. Flowers mixed with Morinda to dye red. *Roxb.*, ii, 233.—*Dr. J. L. Stewart, page* 90. *Voigt*, 131.

GROUHONEE, URIA ? **KUDATEE,** URIA. ? A tree of Ganjam and Goomsur, extreme height 80 feet, circumference 6 feet, and height from ground to the intersection of the first branch, 12 feet. The platform of the cars used at the Juggurnauth festival is often made of this wood, but it is chiefly used for firewood, being tolerably common. The bark is said to be used medicinally in diarrhœa.—*Captain Macdonald.*

GUATTERIA, a genus of plants, G. anonæfolia, *D. C.*, grows in Tavoy. G. coffeoides, *Thw.*, in Ceylon, and G. cinnamomum, *D. C.* in Singapore.

GUATTERIA CERASOIDES, *Duval. Cor. ; W. & A. ; Hook. & Thom. Fl. Ind.*

Polyalthia cerasoides.
Uvaria cerasoides, *Roxb.*, *Cor.*

Hoom. MAHR.	Dudduka. TEL.
Nulœli ? maram. TAM.	Chitta duduka. ,,
Mulili ? maram. ,,	Chilka ? dudugu. ,,
Duddaga. TEL.	

This tree grows in the Bengal, Madras and Bombay Presidencies. In Coimbatore, it is a moderate-sized tree. Its wood, as seen in a three or four years old branch, is white and close-grained. It is a tree common in the Bombay coast and ghat forests ; less so inland and may be easily recognized by its great straightness and handsome appearance. Its reddish and close-grained wood is there useful in general carpentry, as well as for naval purposes, as boat-masts, small spars, &c. On the Godavery it appears to be a tolerably hard wood and does not seem to warp. The natives, on the Godavery, do not however, use it, and say that it is soft. Mr. Latham writes of it as occurring in the Nalla Mallai, as a white tolerably hard wood. The natives, he says, use it little, but he considers it a useful wood. —*Roxb., II,* 666. *Voigt, Drs. Wight and Gibson, Captain Beddome, Mr. Latham.*

GUATTERIA LONGIFOLIA, *Wall. ; W. & A.*

Polyalthia longifolia.	Unona longifolia, *Dun.*
Uvaria longifolia, *Roxb.*	

Mast tree. ENG.	Thovatharu. TAM.
Asok maram. TAM.	Asoka chettu. TEL.
Deva-daru. ,,	Asokam. ,,

A very handsome erect-growing large tree, but wood soft and useless. It is much grown in the town of Madras for ornament.

GUAZUMA TOMENTOSUM, *H. B. ; Kunth. W. & A. ; W. Ill.*

Guazuma ulmifolia, *Wall.*	Bubroma guazuma, *Willd. Spr.*

Bastard cedar. ENG.	Rudraksha chettu. TEL.
Pattipariti. Tam of Ceylon.	

A tree introduced by Dr. Anderson about 70 years ago from South America, common in the Dekhan, pretty common about Madras,

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evidently planted, the fruit is tubercled, about the size of a cherry. It grows at Jaffna in Ceylon. Its young bark abounds in mucilage and is used in the Mauritius to clarify sugar; its wood is used for furniture and coach panels.—*Dr. Cleghorn in M. E. J. R; Thw., Voigt, Drs. Riddell and O'Shaughnessy.*

GUETTARDA SPECIOSA, *Roxb.* i, 686. A tree of Singapore, grown in gardens in the Indian Peninsula.—*Voigt.* 687.

GULONCHI, HIND.? A tree of Chota Nagpore, with hard, white timber.—*Cal. Cat. Ex.* 1862.

GUMBHAR, HIND.? A light-coloured wood, close-grained and light, grows in the Santhal jungles, but scarce. It is used for planks and in constructing palkees. It is this wood with which the beautiful lac ornaments are made, such as work-boxes, envelope cases, pen trays, &c., for which Sooree is celebrated.—*Cal. Engineers' Journal, July* 1860.

GUMBAREE, HIND.? A tree of Cuttack, found more or less plentifully throughout the forest jungles of the Sumbulpore district and the Tributary mahals.—*Cal. Exhib.*

GUND, it is chiefly from this plateau on the Malabar Coast, that the demands of H. M. naval department are intended to be met.—*Dr. Cleghorn.*

GYEW, BURM.? A tree, maximum girth 2 cubits, maximum length 15 feet. Found abundant in the jungles round Moulmein and all over the provinces. When seasoned it floats in water. Stated by the Burmese to be equal to chisel-handle tree, Dalbergia, *species*; but if so, Captain Dance had not seen a favorable specimen.—*Captain Dance.*

GUMSUR FORESTS. Captain Beddome informed the Madras Government that the most valuable of these forests, form a half-circle around Russelcondah. The numbers of Shorea robusta trees are great. Next to that tree are the Soymida febrifuga, very abundant; and the Conocarpus acuminatus, the most graceful of forest trees, tolerably abundant. The trees to be found are as under :—

Acacia arabica—Gongo-babul.
Acacia procera—Surapatari.
Acacia sundra—Khoiru.
Acacia suma—Gouharea.
Ægle marmelos—Bello.
Ailanthus excelsus—Gorlni kawat.
Alangium lamarkii—Akola.
Albizzia lebek—Siris.
Antidesma diandrum—Nuniari.
Artocarpus integrifolia—Panasa.
Azadirachta Indica—Nimu.
Barringtonia acutangula—Holondha.
Bassia latifolia—Mohulu.
Bauhinia racemosa—Ambhota.
Bauhinia variegata—Borara.
Bignonia suaveolens—Patuli.
Bombax Malabaricum—Bouro.
Bono-Koniari—Koniari ??
Briedelia retusa—Kosi.
Buchanania latifolia—Charu.
Butea frondosa—Polasu.
Callicarpa, *sp.*
Calosanthes Indica—Pamponia.
Careya arborea—Kumbi.
Caryota urens—Salopo.
Casearia tomentosa—Girari.
Cassia florida.
Cathartocarpus fistula—Sundari.
Chloroxylon Swietenia—Bheyree.
Citrus, *species*—Ambeletoba.
Cluytia collina—Korada.
Conocarpus acuminatus—Pasi.
Conocarpus latifolius—Dohu.
Dalbergia latifolia—Sissua.
Dalbergia Oojeinensis—Bandhona.
Dalbergia paniculata—Dhobi.
Dillenia speciosa—Rai.
Diospyros glutinosa—Gusva-kendhu.
Diospyros sylvatica—Kaloochia, Pitta kaloochia.
Diospyros melanoxylon—Kendhu.
Ehretia lœvis—Mosonea.
Elæodendron Roxburghii—Pisi chandra.
Emblica officinalis—Ohalu.
Eriochlæna Hookeriana—Bonabendi.
Erythrina Indica—Chaldua.
Eugenia caryophyllifolia—Bhata jama.
Eugenia jambolana—Jamu.
Euphorbia antiquorum—Lodhoka sidjo.
Feronia elephantum—Koeto.
Ficus, *sp.*—Baidhimeree.
Ficus ampelos—Karsan.
Ficus cunia—Puriey kuli.
Ficus glomerata—Dhimeri.
Ficus Indica—Boru.
Ficus religiosa—Usto.
Ficus tsiela—Jari.
Flacourtia sapida—Boincha.
Gardenia latifolia—Kota-ranga.
Gardenia turgida—Bamemia.
Garuga pinnata—Mohi.
Gelonium lanceolatum—Kakra.
Grewia Rothii—Kulo.
Grewia tiliæfolia—Dhamono.
Grislea tomentosa—Jatiko.
Guru-hadu ??
Hedera obovata.
Holarrhena antidysenterica—Patru, kurwan.
Hymenodyction excelsum—Bodaka.
Ixora parviflora—Tellu kurwan.
Jonesia asoca—Asoka.
Junda mari ??
Kola sabaju :—Sabaju ???
Kydia calycina—Kopasia.
Lagerstrœmia parviflora—Sidha.
Lawsonia inermis—Maughati.
Limonia acidissima.
Mallea Rothii—Rain billi.
Mangifera Indica—Ambo.
Melia azedirach—Maha nimu.
Moresingha ??
Michelia champaca—Champa.
Morinda tinctoria—Achu.
Moringa pterygosperma—Munigha.
Murraya exotica.
Nauclea cadamba—Kadambo.
Nauclea parviflora—Munda-munde.
Nirasu ??
Nyctanthes arbor tristis—Gongo-sheoli.
Ochna squarrosa—Bona koniari.
Poivrœa Roxburghii—Kohkundia.
Pongamia glabra—Korunju.
Premna latifolia—Gondhona.
Prosopis spicigera—Koduru.
Pterocarpus marsupium—Piasalu.
Pterospermum suberifolium—Barlo.
Randia dumetorum—Pativa.
Randia longispina—Salora.
Randia uliginosa—Pendra.
Rottlera tinctoria—Sundra gundi.
Sapindus emarginatus—Muktamaiya.
Schleichera trijuga—Kusum.
Schrebera Swietenioides—Juntia.

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Semecarpus anacardium—Ballia.
Shorea robusta—Salwa.
Soymida febrifuga—Sohn.
Spondias mangifera—Amra.
Strychnos nux-vomica—Korra.
Strychnos potatorum—Kotoku.
Tamarindus Indica—Tentooli.
Terminalia arjuna—Arjuna.
Terminalia belerica—Bhara.
Terminalia chebula—Haredha.
Terminalia tomentosa—Sahaju.
Trophis aspera—Sahada.
Vitex negundo—Beygoona.
Vitex pubescens—Dhalasingha.
Wendlendia tinctoria—Telly.
Wrightea tomentosa—Pal-kurwan.
Zizyphus, *sp.*—Barokolee.
Zizyphus, *sp.*— Kouteyi kulli.
Zizyphus xylopyra—Ghota.

—*Captain R. H. Beddome in Proceedings of Madras Government, No.* 429 *of* 1864.

GURHWAL AND KUMAON. R. Thompson, Esq., Assistant Conservator of Forests, has given the following list of the trees in the Gurhwal and Kumaon forests:—

Acacia catechu—Khyr : Khyree.
,, elata—Burroo : Kurrah.
,, speciosa—Sirrus : Sirsee.
,, stipulata—Kounjairee.
Acer oblongum—Kirmolee.
Ægle marmelos—Bael.
Alstonia scholaris—Chutyoun.
Anogeissus (Conocarpus) latifolia—Bauklee : Dhoura.
Antidesma diandra—Amlee.
Artocarpus Lacoocha—Dhao.
Azidarachta (Melia) Indica—Neem.
Bambusa arundinacea—Bans : Banslee.
,, aspera—Burrakuteela bans.
,, spinosa—Kuttalee bans.
Bassia butyracea—Choora, the butter Falwa.
,, latifolia—Mowa.
,, racemosa—Maloo : Maljhun.
Bauhinea purpurea—Kundlauh.
,, variegata—Quiral.
,, parviflora—Amlee.
Berberis aristata—Kingorah.
Bergera Konigii—Gundelah.
Bignonia suaveolens—Padul.
,, suberosa—Oolloo : Timteeah.
,, tomentosa—Darroolee.
Bohmeria nervosa—Ghantee.
Bombax heptaphyllum—Simul : Mohr-jingar.
Boswellia glabra—Doom-sal.
Briedelia spinosa—Gya : Goulee : Khajah.
Buchanania latifolia—Kut-bhillowa : Cheeronjee : Pyal.
Bukkurcha ?
Butea frondosa—Dhak : Kasoo.
Cæsalpinia sepiaria.
Calamus Roylesnus—Bet : Bettanee.
Capparis horrida—Oolta kanta.
Careya arborea—Koombhee.
Casearia cheela—Cheela-cheelara.
Cathartocarpus fistula—Shemara : Ptola : Umbultas.
Cedrela toona—Toon.
Cedrus deodara—Dudar : Dwar : Dar.
Celastrus nutans—Malkgonee.
Celtis tetranda—Khurruk.
Cerasus puddum—Pyah.
Citrus Bergamia—Neemboo : Leemboo.
,, limonum—Bejoura.
Cochlospermum gossypium.
Conocarpus latifolia—Banklee.
,, latifolia ? ?—Byrola.
Cordia myxa—Lussora.
Cratæva crenulata—Belausee.
Croton tigleum—Jamalgotha.
Dalbergia Ougienensis—Sandion.
,, robusta.
,, Sissoo—Sheeshum.
Diospyros tomentosa—Tandoo : Abnoos.
Diospyros ? lanceæfolia—Loharee.
Ehretia lœvis—Khodah : Chamroor.
,, serrata ,, ,,
Emblica officinalis—Oulah.
Erythrina suberosa—Roongra.
Eugenia (Syzygium) caryophyllum—Pymun.
Feronia elephantum—Kyth.
Ficus, *sp.*
F. acuminata—Khaubur.
F. cordata—Dhodee.
F. cunia—Khewnia.
F. glomerata—Goolur.
F. Indica—Burr.
F. macrophylla—Timulla.
F. religiosa—Pepul.
F. villosa—Pilkhun.
Falconeria insignis—Khiuna.
Flacourtia sapida—Billangroo.
Garruga pinnata—Kitmirra : Kattloo : Khurpat.
Gmelina arborea—Khâmârrâ : Koomar.
Grewia elastica—Dhamun : Phursoolah.
Gynaion vestitum—Peena.
Holarrhena anti-dysenterica—Kooree : Dhodee : Inderjao.
,, pubescens—Asoke.
Hymenodyction excelsum
Jonesia asoca.
Kydia calycina—Putta, Poolou.
Lagerstrœmia parviflora—Dhoura : Dhouree.
Laurus villosa—Koul.
Mangifera indica—Am.
Melia azedarachta—Neem.
,, Indica—Bakain.
Michelia champaca—Champa.
Moringa pterygosperma—Songna.
Murraya exotica—Murchola.
Nauclea cadamba—Kuddum.
,, cordifolia—Huldoo.
,, parviflora—Phuldoo.
Nerium oleander.
Nyctanthes arbor tristis—Koorah.
Odina wodier—Kunmun ; Jhingun.
Olea glandulifera—Gyr.
Pentaptera glabra—San ; Sein.
,, tomentosa—Assein.
Pinus longifolia—Cheer ; Sullah.
Pongamia glabra—Papree.
Putranjiva Roxburghii—Naugea Jobtee.
Pyrus variolosa—Mahul.
Quercus incana—Banj.
Randia dumetorum—Mandloo ; manulo.
,, longispina—Thunella ; Thunaie.
Rhus kakra singee—Kakur.
Rottleria tinctoria—Reunah ; Rolle.
Salix tetrasperma—Gud ; Byns.
Schleichera trijuga—Goosum ; Koosum.
Semecarpus anacardium—Bhillawah.
Shorea (Vatica) robusta—Sal ; Kundar.
Sponia, *species*—Bhatoo.
Spondias mangifera.
Sterculia villosa—Oodal.
Symplocos racemosa—Lodh.
Sysygium Jambolanum—Phullindah ; Jamoon.
,, laterifolium—Jamoon ; Jamoonee.
Tetranthera monopetala—Maida lakri.
,, apetala—Singroop ; Kutmarrah.
Terminalia bellerica—Bhyrah.
,, chebula—Hur ; Hurrah.
Ulmus integrifolia—Kunjah.
Vitex, *species*—Kyne.
Wrightia mollissima—Dhodee.
Xanthoxylon hostile—Timmoor.
Zyzyphus jujuba—Ber ; Bare.
,, kuther.

GYNAION VESTITUM, *DC.*

Cordia vestita, H. et. Th. | C. incana, *Royle.*
Darúk of Salt Range. | Indak of Salt Range.

Peena of Kanawar. | Kurobi on Beas.

The tree is not uncommon in the lower Siwalik Hills as far-west asRajauri. Grows to a moderately large size in all the moist wa[illegible] valleys of the Dhoon, affording good shade in the hot weather. The wood is good and heavy, something like "kikar," but of small size; and in the Panjab is not much valued. It is tough and durable, used in making mill-wheels.—*Messrs. R. Thompson and Powell, Dr. J. L. Stewart.*

GYO, Burm. ? A wood of Amherst, used for house-posts, ploughs, hand-spikes, &c.; it is a close-grained, compact, fine wood.—*Captain Dance.*

GYRINOPS WALLA, *Gœrt.* 251.

Cameraria Zeylanica, *Moon*, Ct. 20.

Walla-gaha. Singh.

A small common tree on the coast of Ceylon, wood white, and used for inlaying; a tough fibre procured from its bark.—*Mr. Fergusson.*

GYROCARPUS JACQUINI, *Roxb.; Cor. pl.*

Gyrocarpus Asiaticus, *Willde.*
,, Jacquini, ,,
G. Americanus, *Grah.*

Tanuko. Tam.

A tree of the Coromandel mountains; grows on the banks of the Kistnah at Nilatwar, and not uncommon in the hot and drier parts of Ceylon. Wood white and very light: when procurable, it is used for catamarans, in preference to all others; much used for making cowrie boxes and toys, takes paint and varnish well. Tella poonkee "Givotea Rottleriformis" is used also for the same purposes.—*Captain Beddome, Thwaites, Voigt, Roxb., I, p.* 445.

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HADIWICKE, Singh. A moderately hard, fine and close-grained, rather heavy Ceylon wood.—*Edye ?*

HÆMATOXYLON CAMPECHIANUM, Logwood. This tree has been introduced into India. It grows readily and seeds abundantly, but it remains to be seen whether it will attain a large size in this country. It is used only as a dye, and the bark is astringent in a considerable degree. It is a promising tree and deserves attention. It is a low spreading tree, seldom thicker than a man's thigh.—*Eng. Cyc., Dr. Cleghorn in Madras E. J. R.*

HAL, the Tamil name of a Ceylon tree which grows to about 2 feet in diameter, and 12 feet high. It is used in native vessels, palanquins, &c., and produces a fruit which the natives eat.—*Edye on the Timber of Ceylon.*

HAMA RAJA ? A very small Penang tree, little used.

HAMILTONIA SUAVEOLENS, *Roxb.*

Muskei. Panjab.
Kautalu. ,,
Fisouni. ,,
Niggi. ,,
Pudari. ,,
Tulenni. Panjab.
Phul. ,,
Gohinla. ,,
Kanera. ,,
Philla. ,,

Grows at 2,500 to 6,000 feet on the Panjab Himalaya. Its wood is small but made into gunpowder charcoal.—*Dr. J. L. Stewart, page* 111.

HANDRO, Hind. ? A tree of Chota Nagpore. Hard, red timber.—*Cal. Cat. Ex.* 1862.

HARDWICKIA BINATA, *Roxb., II,* 423; *W. & A.*

Karacho. Can.
Anjun. Mahr.
Acha maram. Tam.
Atti maram. ,,
Epe. Tel.
Nara épa. ,,
Nar yepa. ,,

This large leguminous tree grows in the forests of the Godavery; in the Nalla Mallai, on the mountains of the Coromandel coast, in some parts of Khandeish, and in the Padshapoor jungles, in the Guzelhete pass, common in Lulling pass between Malligaum and Dhoolea and on the hills of the Sone valley. It is a most elegant tree, tall and erect, with an elongated coma and the branches pendulous. On the Godavery, it is often hollow in the centre. Yields a timber of an excellent quality for beams and a variety of uses. The wood is red or dark-coloured, very hard, very strong and heavy. As the shoots grow up very straight, it is also valuable for rafters. The bark yields a strong fibre and the people of the island of Siva Samudram use it without further preparation.—*Roxb.* ii, 423, *Voigt, Mr. Rohde's MSS., Hooker's Him. Journ., Vol. I., p.* 50, *Mr. Latham, Captain Beddome, Dr. Gibson.*

HAUDIGA, Can. ? A Mysore wood, used for furniture; polishes and turns well, useful for the cabinet-maker; and would do for veneering.—*Mad. Cat. Ex.* 1862.

HAVUN. A yellow-coloured and strong wood of the Sonthal jungles from Raneebahal to Hasdiha or about forty miles, but scarce. It is used for building purposes by the natives and also for cart wheels.—*Cal. Engineers' Journal, July* 1860.

HEADIE, the Malayala name of a tree in the forests of Canara. It grows from eighteen inches to two feet in diameter, and from thirty to fifty feet high. It is a close-grained wood, and is said to be durable; but it is rather scarce.—*Edye, Forests of Malabar and Canara.*

HEBALSU, Can. ?

Wild Jack wood. Eng.

Sent to the Exhibition of 1862 from South Canara. Major Beddome says it is Artocapus hirsuta.—*Mad. Cat. Ex. of* 1862.

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HEBRADENDRON GAMBOGIOIDES, *Graham.*

Cambogia gutta, *Linn.*
Mangostana morella, *Desrouss.*

Gokatu. SINGH. | Kana goraka. SINGH.

A moderate-sized tree of Ceylon. The gamboge of commerce oozes out of the bark of this tree.

HEBRADENDRON PICTORIUM, *Lind.*

A tall tree of the Malabar coast, yields a gamboge.—*Royle's Mat. Medica.*

HEDERA EXALTATA, *Thw.*

Goda-Itta. SINGH.

A large tree, growing in the central province of Ceylon, at an elevation of 4,000 to 6,000 feet. It has handsome digitate leaves. Wood soft.—H. palmata is a small tree of Nepaul and Chittagong : H. heterophylla belongs to Penang, and H. terebinthacea to Courtallum and Penang—*Voigt*, 25, *Mr. Fergusson, Thw. En. Pl. Zeyl., p.* 132.

HEMICYCLIA, a genus of moderate-sized trees of Ceylon. H. Gardneri, *Thw.*, not very abundant : H. lanceolata, *Thw.*, grows at Caltura, Ceylon, and H. sepiaria, *W. and A.*, "Weera-gass," *Singh.*, is abundant in the hot drier parts of the island. H. lanceolata has a tough, hard timber, its Singhalese name is Ella-pini baru. The wood of H. sepiaria (weera-gaha, *Singhalese*) is hard and close-grained, equal to boxwood.—*Thw.*, *p.* 287, *Fergusson.*

HEMIGYMNIA MACLEODII, *Griff.* ?

Cordia MacLeodii, *Beddome.*

Botku. TEL. | Deyn gan. HIND. ? of Jubbulpore.

This tree is abundant in the Godavery forests, near Mahadeopore : it does not extend down to the Circars. It is found near Warungul. It is also indigenous to the Jubbulpore forests, where it is called "Deyngan." It is, Captain Beddome feels certain, the tree described by Dr. Griffiths as "Hemigymnia Macleodii." He described it from dried specimens and thought that the leaves were opposite (instead of alternate) otherwise his description and native name agree. A very beautiful wood. It would answer as a substitute for maple for picture frames, &c.—*Captain Beddome.*

HENSLOWIA PANICULATA, *Miqu.*

Anambo. BURM.

A reddish-coloured wood of British Burmah, not straight-grained, used occasionally for cart-wheels, mostly for firewood. In a full-grown tree on good soil the average length of the trunk to the first branch is 50 feet, and average girth measurd at 6 feet from the ground is 9 feet.—*Dr, Brandis, Cal.Cat. Ex.* 1862.

HERITIERA, *Species.*

Pinlay kanazoe. BURM.

Common in the Delta of the Irrawaddy, in British Burmah ; wood used for house-posts and rafters, and for firewood for the manufacture of salt. The tree is nearly related to the "Soondree" of Bengal. A cubic foot weighs lbs. 66. In a full-grown tree on good soil the average length of the trunk to the first branch is 30 feet, and average girth measured at 6 feet from the ground is 6 feet.—*Dr. Brandis, Cal. Cat. Ex.* 1862.

HERITIERA LITTORALIS, *Ait.* ; *DC.* ; *Roxb.*

Balanopteris tothila, *Gærtn.*

Ka-na-zoe. BURM. | Looking-glass tree. ENG.
Kon-zo-za-loo. ,, | Homœderiye. SINGH.

Grows in the Mauritius, Ceylon, the peninsula of India, in the Sunderbunds ? common in the Rangoon district, and along the sea-shore in Amherst and Tavoy. Very abundant on the Islands ; found on Pannat Island and all the Mergui Archipelago. When seasoned, it floats in water. Maximum girth four cubits, maximum length thirty feet. It is used for boats, boxes, planks of houses, &c., is a very light wood, scented, durable, and is the toughest of the woods of India, so far as yet tested. It is recommended for fuzes beyond any other wood from Amherst, Tavoy or Mergui, also for helves and for gun-stocks. Strongly recommended for packing cases of all descriptions.—*Roxb.* iii, 142, *Voigt*, *Dr. McClelland, Capt. Dance*, *Mr. Fergusson.*

HERITIERA MINOR, *Lam.* ; *DC.* ; *Roxb.*

Heritiera fomes, *Willde, Buch., DC.*,
Balanopteris minor, *Gærtn.*

Soondree. BENG. | Kun-na-zoo. BURM.
Ka-na-zo. BURM. | Kon-nay-zow. ,,

A gloomy-looking tree that may be distinguished from all others for many miles distant. It is remarkably characteristic of a peculiar soil. Wherever the tides occasionally rise and inundate the land, this tree is sure to be found throughout the whole Tenasserim coast, but it is never found at home, either on the high dry lands on the one hand, nor in the wet mangrove swamps on the other. It is the tree which was described by Dr. Buchanan Hamilton, who accompanied Symes' embassy, as *Heritiera fomes.* It grows in the Sunderbunds, and is used in Calcutta for fire-wood. Both the *Heritiera minor* and *H. littoralis* are common in the Rangoon district, along the creeks, and *H. minor* furnishes the Soondree wood so well known in Bengal for its strength and durable qualities. Although so common on the Bengal coast, as to give name, as Captain Munro thinks, to the Sunderbunds, yet the tree grows much larger in the Tenasserim Provinces, and affords finer timber

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It is indigenous in the Mayagee forests and on the [illegible]ungs' Kayoo, Thabyeed and Thunat, and in some sections is quite abundant. In Tavoy, it is a large tree furnishing very hard and durable wood. In Amherst, Tavoy and Mergui its maximum girth is 2 cubits, and maximum length 15 feet. It is very abundant, but straggling ; found in Martaban, and on both sides of the Moulmein river, and all along the sea-coast ; an unlimited supply of it is procurable. When seasoned, it floats in water, and is tough, light and durable. Indeed, it is the toughest wood that has been tested in India. When Rangoon teak broke with a weight of 870 lbs., Soondree sustained 1,312 lbs. It is not an equally durable wood, but stands without a rival in strength. It is used for boats, also piles of bridges, boxes ? and many other purposes. It is recommended for helves, but should be killed a twelvemonth before being cut down, or otherwise should be seasoned by keeping after it has been cut down. Dr. Wallich says it stands unrivalled for elasticity, hardness and durability, and adds that, "if not extensively employed for the construction of naves and felloes of gun carriages, it is solely because pieces of adequate dimensions are not procurable." But Dr. McClelland's informants asserted, that immense quantities, sufficient for such purposes, are obtainable here. Dr. Wallich adds that the charcoal made from it is better than any other sort for the manufacture of gunpowder.—*Roxb.* iii, 142, *Dr. McClelland in Selec. Records of Government of India, Foreign Dept., No. IX., p.* 43, *Dr. Mason, Captain Dance, Voigt.*

HERNANDIA OVIGERA, *Linn.*

Arbor ovigera, *Rumph.*

A tree of the Moluccas.—*Roxb.* iii, 677, *Voigt*, 305.

HERNANDIA SONORA, *Linn.*

Hernandia Guianensis, *Aub.*

Jack in the box. ENG.
Bong-ko. JAVAN.
Palatu-gaha. SINGH.

A tall, erect tree of the West Indies, of the Moluccas and the Fiji islands ; in the last, forming one of the sacred groves—a complete bower. It grows also in Ceylon, and will probably be found in many parts of India. The wood is so very light and takes fire so readily from a flint and steel, that it may be used as tinder. The bark, seed and young leaves are cathartic. The juice is an effectual depilatory, removing the hair without any pain.—*Ains., O'Shaughnessy, Voigt,* 305, *Seeman's Fiji Islands, Eng. Cyc.*

HIBISCUS LAMPAS, *Cav.* A small tree of the foot of the Himalaya, Hindostan, Bengal, and both peninsulas of India.—*Roxb.* iii, 197, *Voigt, M. E. J. R., Wight's Ic., Mr. Ferguson.*

HIBISCUS HETEROPHYLLUS, the Currijong tree of Australasia, attains an elevation of 30 or 40 feet, with a circumference of 6 or 8 feet. Fishers' lines and nets are made from its rough grey soft bark, and canoes are made of its soft spongy wood. It grows in rocky elevated places.—*Bennett's Gatherings, Roxb.* iii, 213, *Voigt*, 118.

HIBISCUS MACROPHYLLA ? is very plentiful in the forests of the Pegu and Tounghoo districts, also in Tavoy : it is a tall slender timber, of three or four feet girth, and would do for boards and house-posts. Wood white colour and adapted for every purpose of house-building.—*Dr. McClelland.*

HIBISCUS PATERSONII, *DC. ; Prod. I, p.* 454, *Ait.*

Lagunæa Patersonia, *B. M.*

White oak of Norfolk Island; a shady tree, forty feet high. Its leaves are a whitish green, sepals green and petals pink, fading to white and the size of a small wine glass. It is the largest of the mallow tribe, and attains sixteen feet in circumference. In an economic sense it is said to be valueless, except for firewood.—*Keppel's Ind. Arch., Vol. II, p.* 283, *Voigt.*

HIBISCUS TILIÆFOLIA ? ?

Belygobel. SINGH.

Under these names, Mr. Mendis describes a wood of the western province of Ceylon, a cubic foot of which weighs 38 lbs., and is esteemed to last 20 years. It is used for carriages, palanquins and hackeries—found near rivers.—*Mr. Adrian Mendis.*

HIPPOPHAÆ SALICIFOLIA.

Buckthorn. ENG.

Surch of Sutlej valley.
Tserdkar Thibetan Starbu.
Suts of Kanawar.
Kala bis of Kaghan.

The wood of this thorny shrub is much valued as a fuel in the barren province of Lahaul. It grows at 10,000 feet above the sea level. The fruit has been tried preserved with sugar, but is not so used by natives. It is mentioned in Thibetan books on medicine as useful if boiled into a syrup in diseases of the lungs, &c., &c. The branches are so much valued for dry hedges and for fuel, that they are considered as village property. Tserdkar, in Tibetan means white-thorn. H. rhamnoides, *L.*, a shrub growing at 7,500 to 15,500 feet in the Panjab Himalaya, has a hard wood and makes excellent charcoal.—*Dr. Stewart*, 190, *Mr. Powell, Hand-book.*

HLAINE, an elongated valley of Pegu, extending north and south with the Yomah range, at a distance of ten to thirty miles from its east bank ; the hills at intervals advancing and then receding from the river, but always leaving a broad plain on its bank. The lower

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part of the plain has been cultivated: the higher parts are covered with forest. The *Phoungyee* valley, which lies to the eastward of Hlaine, from which it is separated by a branch of the Yomah, is an amphitheatre, open to the south and surrounded on all other sides by hills. Its breadth from east to west is probably about ten or fifteen miles, and its length from north to south thirty. The *Pegu* or *Zamayee* valley lies to the east of Phoungye, from which it is separated by another branch of the Yomah. This valley is enclosed on all sides by hills; it is about forty or fifty miles in length from S. S. E. to N. N. W., which is the direction in which it lies, and twenty miles in breadth from E. to W. The Zamayee river is large and navigable for small craft in the rains, for a distance of sixty or eighty miles above Pegu, to the extremity of the valley; and although only about knee deep in the dry season, it rises forty feet in the rains; its bed is sandy and unimpeded by rocks. The mountains extending along the N. W. side of the valley, separating it from Phoungyee, the Hlaine and Tharawaddy, are of considerable extent and elevation and form a part of the Yomah range. On the east side it is separated from the plains of Tounghoo and Shoay Gyeen by a lower branch of the same chain, and finally it is enclosed to the south by a low hilly tract through which the river passes by a series of small defiles to Pegu. Dr. McClelland ascended the Thounzai valley in the Hlaine district to its head, and descended through the Oakkan valley, and, having traversed the forests from thence to Mazalee, ascended the Choung. The Hlaine forms a part of the valley of the Irrawaddy with which the Hlaine river is connected by means of creeks.—*Dr. McClelland in Selec. Records of Govt. of India, Foreign Dept., No. IX., p.* 8

HOCOMLIA MONTANA ?

Sampga. CAN.
Tambut. MAHR.
Kudkee. MAHR.

Grows in Canara and Sunda, on and close to the head of the ghats; wood seldom runs large, is white, hard and tough; used for agricultural implements.—*Dr. Gibson.*

HOLARRHENA ANTIDYSENTERICA, *Wall.*

Echites antidysenterica, *Roxb.*
Chonemorpha. „ *G. Don.*

Kuri of Kumaon.
Dhudi of „
Inderjao. „
Kogar of Panjab.
Kawar of Panjab.
Kura of „
Kyur of Kangra.

Occurs in the Bhabur forests of Kumaon, in Nepaul, Sylhet, and Chittagong, as a small tree and logs 5 and 6 feet long and 3 in diameter, are obtainable. Timber in Kumaon is light, fine-grained, of a slightly yellowish colour, is made into elegantly-carved platters, salad forks, salad spoons. It is common in parts of the Siwalik range up to the Chenab river. It is found in the Sutlej valley and in Kangra, and its wood is white, light and close-grained, and is cut into spoons.—*Dr. Stewart, p.* 142, *Mr. Thompson.*

HOLARRHENA CODAGA. Wight's Icon.

Kooda pallei maram. TAM.

In Coimbatore, a white, small-sized, but very fine grained, wood, employed in cabinet-making.—*Dr. Wight.*

HOLARRHENA MITIS, *R. Br. A. D. C.* Pr.

Kirri-walla-gass. SINGH.

A moderate-sized tree of Ceylon, not uncommon, up to an elevation of 1,500 feet. Its wood is light, of a fine close-grain, and is used for inlaying cabinet work.—*Thw. En. Pl. Zeyl., p.* 194, *Mr. Fergusson.*

HOLARRHENA PUBESCENS, *Wall.*

A small tree in Burmah and Kumaon, with timber similar to H. anti-dysenterica.—*Mr. Thompson, Voigt,* 524.

HOLIGARNA LONGIFOLIA, *Roxb. Fl. Ind. II, p.* 80.

Holgeree. CAN.
Holgeree. MAHR.

One of the trees yielding the well-known black lacquer varnish. It grows in Travancore, in Malabar, in Canara and Sunda, mostly above the ghats; at Nilgoond, in the Konkan, Assam, Chittagong, and in the forests of Tenasserim. Wood good for houses and beams. Its exudation is used by the natives to varnish shields and for other purposes. Juice dangerously acrid. A fine black varnish from its fruit is brought from Munnipore. This turns of a beautiful black colour, when applied to a surface, owing, according to Sir D. Brewster, to the fresh varnish consisting of a congeries of minute organised particles, which disperse the rays of light in all directions; the organic structure is destroyed when the varnish dries, and the rays of light are consequently transmitted. There are also brought from Munnipore, a varnish, made from *Semecarpus anacardium* (marking nut), and a remarkable black pigment resembling that from *Melanorrhœa usitatissima,* which is white when fresh, and requires to be kept under water. H. Racemosa, *Roxb.* ii, 82, is a tree of Chittagong, Sylhet and Assam.—*Roxb.* ii, 80, *Voigt, Drs. Gibson, O'Shaughnessy and Mason, Hooker's Him. Jour., Vol. II, p.* 331.

HOLONG, HIND. ? A tree of Chota Nagpore, furnishing a hard, red timber.—*Cal. Cat. Ex.* 1862.

HOMALIUM TOMENTOSUM ?

Myouk-kyan. BURM.

A tree of Moulmein. A strong wood for any ordinary purpose.—*Cal. Cat. Ex.* 1862.

[illegible]NAGUL, Can. A Mysore wood.—*Mad. Cat. Ex.* 1862.

HOONSOOR COMMISSARIAT TEAK FOREST is large, but has been much neglected, and requires to be conserved, for there has been wasteful exhaustion of teak. The Cooroobur revelled in this forest, and did immense damage. It is supposed that this forest alone, if worked under a systematic plan would give a regular supply of good timber to the State and the public. It has better means of communication than any in the belt of teak, and contains about one hundred and thirty square miles of timber trees.—*Madras Conservator's Report.*

HONGE, Can.

Hip-pe. Can. | Moha. Hind. Mahr.
Kuranj. Hind. Mahr. | Nella Kalavalu. Tel.

Under these names are known two different trees growing in the woods of Mysore. Oil is obtained from both of their seeds and sold, but the oil of the former is very smoky and bad though clear to look at; that of the Hippay, is as white and good as the cocoanut oil. The Hip-pe trees are extensively planted in topes in front of villages, for the purpose of obtaining oil.—*M. Ex. of* 1857. (*Note.*—They are Bassia latifolia and B. longifolia)

HOONSAY, Can. A Mysore wood.

HOPEA. *Sp.*

Thingadoe. Burm.

This large tree abounds in the same localities of British Burmah as H. odorata, but the wood is not equally valued. A cubic foot weighs lbs. 52. In a full-grown tree on good soil, the average length of the trunk to the first branch is 100 feet, and average girth measured at 6 feet from the ground is 20 feet. It sells at 12 annas per cubic foot.—*Dr. Brandis, Cal. Cat. Ex.* 1862.

HOPEA DECANDRA, *Buch.*

Ooroopa. Mal.

Ooroopa is the Malayala name of a tree which the natives of that country prefer to teak for building ships, being more durable and close-grained.—*Ain's. Mat. Med., p.* 207.

HOPEA DISCOLOR, *Thw.* A large tree of Ceylon in the Saffragam and Ambagamowa districts, at no great elevation. The underside of the leaves are of a rich brown colour.—*Thw. En. Pl. Zeyl. I, p.* 36.

HOPEA FLORIBUNDA ?

Tantheya. Burm.

A very large tree of Tavoy.

HOPEA ODORATA, *Roxb.*

Thingan. Burm.

It grows in Chitagong ; Dr. McClelland says it is scarce in Pegu, and that a few trees are to be found about the vicinity of Rangoon ; Dr. Brandis mentions that it is one of the finest timber trees of British Burmah, being found near mountain streams and in the evergreen forest, and that large specimens of this valuable tree are common east of the Sittang river, but it is rather scarce in the greater part of Pegu. The trees are found near Moulmein in laterite and sandstone chiefly ; it is a light-brown wood ; and at Moulmein is a very strong but coarse-grained timber, used extensively by the Burmese in the construction of boats and canoes, which are formed from the trunks of these magnificent trees of a size fit for carrying 3 or 4 tons. The trunk is scooped or burnt out and stretched in the centre ; whilst warm, by means of cross pieces of wood. When the required breadth is obtained, the sides are built up to obtain a greater capacity, these tree boats, if they may be so called, are from 7 to 8 feet beam. The Thingan trees grow to a height of 250 feet, and are considered the most valuable indigenous timber trees in the southern provinces of Tenasserim ; at Tavoy and Mergui it is sawn up for building purposes. The breaking weight may be stated at 800 lbs. with a specific gravity of 45 to 46 lbs. ; the wood is much prized for cart-wheels and boats made of it, are said to last for more than twenty years. A cubic foot weighs lbs. 64. In a full-grown tree on good soil, the average length of the trunk to the first branch is 80 feet, and average girth measured at 6 feet from the ground is 12 feet. Captain Dance gives, under this name, two descriptions of timber, which it seems advisable to record, viz :

Hopea odorata. *Thingan*, Burm.

Maximum girth, 6 cubits. Maximum length, 60 feet. Scattered but abundant in the provinces of Yea on the coast beyond Amherst, also at Mergui, and in lesser quantity near Moulmein. When seasoned, floats in water. Formerly considered the most valuable indigenous timber in the southern provinces and used at Tavoy and Mergui for building houses. Used also for canoes, junks, &c. A very durable excellent wood when kept under water as in the planks of a boat or under cover on land ; but often liable to split when exposed to the sun in a dry state. Recommended for helves.

Hopea odorata. *Thingan Pew*, or White Thingan, in Amherst, Tavoy and Mergui ; maximum girth 4 cubits, maximum length 30 or 40, scattered but abundant. Found in the same localities as the red Thingan. When seasoned, floats in water. It is a lighter variety of the red Thingan. This is a tolerable wood for durability, and would do for helves, but more suitable woods are in the list of

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those recommended. *Roxb.* ii, 609 *Voigt*, 125, *Drs. Mason, McClelland, Brandis, Cal. Cat. Ex. of* 1862, *Captain, Dance, Major, Benson.*

HOPEA SUAVA, *Wall.*

Eng-yin. Burm.

This valuable tree is found in the Eng forests of British Burmah, but large trees are not common in Pegu. Wood tough and hard but heavy, used in house-building, for bows and a variety of other purposes, and said to be as durable as teak. A cubic foot weighs 55 lbs. In a full-grown tree, on good soil, the average length of the trunk to the first branch is 60 feet, and average girth measured at 6 feet from the ground is 7 feet.—*Dr. Brandis, Cal. Cat. Ex.* 1862.

HOPEA WIGHTIANA, *Wall.* A tree of the Peninsula of India. *Voigt*, 126.

HUNDA PALE, a Malabar and Canara tree, which produces a fruit. It grows to about 18 inches in diameter, and 20 feet high. It is not of much use except for its fruit which is eaten by the natives and by wild animals.—*Edye's Forests, Malabar and Canara.*

HUNTERIA ZEYLANICA, *Gard. MSS.*

Cameraria oppositifolia, *Moon. Cat.*

Modiya gaha. Singh.

A small tree of Ceylon, growing to an elevation of 2,000 feet. Wood greatly resembling that of box and answers well for engraving.—*Mr. Fergusson.*

HURA CREPITANS, *Linn.*

Sand-box tree. A middle-sized tree of rapid growth, native of tropical America. The trunk is strongly armed, the wood light and useless, the seeds are poisonous.—*M. E. J. R., Voigt*, 126.

HUSHYARPUR. These forests are still utilized ; also the Mahan and Santha forests of Kangra. In Hushyarpur the principal tracts are the Lohára and Panjal : the trees are principally cut for "balis," bullies, or poles, which are sold at 2 to 3 Rs. per hundred according to the thickness of the wood, which varies from 6 to 10 inches, and the length varies from 10 to 18 feet.—*Powell, Handbook, Econ. Prod., Panjab, page* 546.

HYDNOCARPUS INEBRIANS, *Vahl.*

Hydnocarpus venenata. *Gærtn.*

Kowtee. Mahr.
Makooloo. Singh.
Murra vuttay maram. Tam.

A large tree, growing in Ceylon on the banks of rivers up to an elevation of 2,000 feet. It is a common tree on the west coast, not so in the Coimbatore jungles. The tree is hardly found in the Bombay northern jungles on the coast ; more frequently in those south of the Savitree river. The wood is not used for any purpose. The seeds of the fruit afford an oil. H. alpinus is a tree of the peninsula, and H. odoratus grows in Assam and Silhet. H. odoratus is the Gynocardia odorata, *Roxb.* and Chaoolmoogra odorata, *Roxb.* —*Voigt, Thwaites, Drs. Gibson and Wight.*

HYMENÆA COURBARIL, *Linn.*

Locust tree. Eng.
Gum Anime tree. Eng.
Courbaril Locust tree. Eng.

It is a fine lofty spreading tree, and grows in the tropical parts of America, in Jamaica, and in Tenasserim. The timber of the old trees is very hard and tough, and is in great request for wheel-work, particularly for cogs. The wood is very hard and is so heavy that a cubic foot is said to weigh a hundred pounds : it takes a fine polish and is used by cabinet-makers. The trunk acquires an immense height. When in a sickly state, it furnishes the resin called *Western Anime.* It was introduced into Tenasserim, by Major Macfarquhar, and is easily propagated. The resin exudes from between the principal roots. It is fine and transparent, of a red or yellowish-red colour, and in large lumps. It resembles amber, is very hard, and sometimes contains leaves, insects, or other objects imbedded in it. It burns readily, emitting a very fragrant smell. Dissolved in rectified spirits of wine it makes one of the finest kinds of varnish.—*Eng. Cyc., Drs. O'Shaughnessy, p.* 314, *Dr. Mason's Tenasserim, p.* 156, *Voigt, p.* 252.

HYMENODYCTION. Of this genus of plants, belonging to one of the Cinchonaceæ, *H. obovatum*, W. Icon., "Yella mala kai maram," Tam., "Kurwye," Mahr., *H. utile*, W. Ic., "Peronjoli maram," Tam., and "Kurwye," Mahr., grow in the Ramghaut, Coimbatore and in Canara, but wood only fit for fuel. *H. thyrsiflorum*, grows at Rajmahal, Chittagong, and at Rangoon.—*Drs. Wight and Gibson, Voigt, Roxb.* i, 530.

HYMENODYCTION, *Species.*

Dudippa (Godavery Forests.) Tel.
Chetippa (Circars). Tel.

A large tree of the Godavery. Wood not used in the Godavery forests.—*Captain Beddome.*

HYMENODYCTION. EXCELSUM, *Wall. in Fl. Ind.* ; *W. & A.* ; *W. Ic.*

Cinchona excelsa, *Roxb.*

Kala bachnak. Duk. Hind.
Cedar wood. Eng.
Kundaru. ? Hind.
Bundaru. Hind.
Barthoa of Hushyarpur.
Thab ,,
Phuldoo of Kumaon.
Patee ,, ,,
Dhoulee ,, ,,
Sagapu maram. Tam.
Burja. ,,
Burija. ,,
Chetippa. ,,
Bandara. Tel.
Pundaroo ? ,,
Dudipa. ,,
Manabira. ,,

Dr. Stewart says that it grows to a large tree in the Siwalik hills and along the Ravi

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riv[illegible] with a timber, white, soft and light, and used for yokes of ploughs and scabbards. Mr. R. Thompson says of Phuldoo, Patee, Dhoulee, that in Kumaon it is a large handsome tree, but ordinary wood soft and perishable ; some seasoned portions however, resembled elm. It is avery large tree, common all round the foot of the Neilgherries, and in the mountainous parts of the Circars, but chiefly in the valleys. The wood is firm, close-grained, of a pale mahogany colour, and very useful for many purposes. The bitter astringent bark is used by tanners, also medicinally, but it contains no alkaloid.—*Drs. Roxburgh,* i, 530, *O'Shaughnessy, p.* 394, *J. L. Stewart, p.* 115, *Mr. Thompson, Mr. McIvor, Ains. Mat. Med.*

HYMENODYCTION OBOVATUM, *W. and A*, A tree of the Ramghaut,—*Voigt.*

HYMENODYCTION UTILE, a tree of Coimbatore and Canara.—*Voigt, Dr. Wight.*

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IARVINI, Tam. ?

Yarviney. Tam.

Crawn. Dut. & Port.

This Ceylon tree grows tall and straight, from twenty to forty-five feet high, and from twelve to thirty inches in diameter. It may be obtained in great quantities, and answers many purposes in ship and house-work.—*Edye on the Timber of Ceylon.*

ICICA INDICA, *W. & A.*

Bursera serrata, *Wall.*
Schinus Bengalensis, *H.B.*

Schinus Saheria, *H. B.*
„ Niara. „

A tree of Assam and Chittagong; its timber is close-grained and hard, as tough as oak, but heavier, and used for furniture by the natives.—*Voigt.*

ILEX. A genus of plants of which Dr. Wight mentions I. Gardneriana and I. Wightiana. Mr. Thwaites mentions as growing in Ceylon, I. denticulata, a large, and I. Walkeri, a small tree. I. denticulata has a good wood. I. chinensis is a tree of China, and I. odorata is a tree of Nipal. Mr. Hodgson, in his "Nagasaki," mentions eight species in Japan, viz., aquifolium, crenata, integra, latifolia, microphylla ; rotunda and serrata.

ILEX DIPYRENA, *Wall.* Grows as a moderate-sized tree up to 9,500 feet in the Himalaya. Dr. Stewart says its wood is not esteemed, but Mr. Powell describes it as a heavy, hard and fine-grained wood like common holly, and used for various purposes of carpentry.—*Wight's Icones, Thw. En. Pl. Zeyl., Mr. Powell, Dr. J. L. Stewart.* *See* JAPAN.

ILEX WIGHTIANA, *Wall., W. Ic., t.* 1,216.

Andung Woenna. Singh.

A common but small tree near Colombo, up to 4,000 feet, with a maximum girth in Ceylon of 8 to10 inches ; but Dr. Wight measured one on the Neilgherries with a girth of 18 inches. Its wood is of a light colour, and is used for roofs and common purposes. Mr. Fergusson considers this and Wight's I. gardnerinna of the Neilgherries, as identical.—*Mr. Fergusson.*

INDIGOFERA, *Species.*

Doun-daloun. Burm.

This tree is four or five feet in girth, found both in the Rangoon and Toungho districts though it is scarce. Wood white colour and adapted for every purpose of house-building—*Dr. McClelland.*

INDIKE, Burm. Ebony of Moulmein.

INGA BIGEMINA, *Willde ; W & A.*

Mimosa bigemina, *Linn.*
„ lucida, *Roxb. Fl. Ind.*
Pithecolobium bigeminum, *Benth. ; W. & A.*

Ta-nyen. Burm.
Katur konna.

Iron wood. Eng. of Burmah ?

This large and beautiful tree grows in the Konkans, Nepaul, Assam and Pegu. It is of smaller girth than the I. xylocarpa, but grows to a great height, and has a black, hard and tough wood. Like the I. xylocarpa, it is called iron wood by the English in Pegu and Tenasserim. In native gardens it is an ornamental tree, with sweet scented blossoms and affording a thick beautiful shade. Its seeds are poisonous when taken internally, notwithstanding which they are sold at a high price in the bazaar, and are used by Burmese and Karens as a condiment to their preserved fish. —*Drs. McClelland and Mason, Roxb.* ii, 544, *Voigt.*

INGA DULCIS, *Willde.*

Mimosa dulcis, *Roxb., Cor. Pl.*
Pithecolobium dulce, *Benth.*

Sweet Inga. Eng.
Manilla Tamarind. Eng.

Koorkapuli maram. Tam.
Sima chinta. Tel.

This small tree of the Philippines, isolated specimens of which are occasionally found from 12 to 18 inches in diameter, resembles the hawthorn in general appearance. It is cultivated in India. It was introduced from Manilla into the Circars, but was a Mexican tree, which the Spaniards had introduced into the Eastern Archipelago. It furnishes a hard reddish wood. It is a most valuable hedge plant, and is now sparingly used along some of the railway lines of the peninsula. The pulp of the fruit is edible.—*Roxb.* ii, 556, *Voigt, Dr. Cleghorn in M. E. J. R.*

INGA XYLOCARPA, *DC.*; *W. & A.*; *W. Ic.*; *J. Graham.*

Mimosa xylocarpa, *Roxb. Cor. Pl.*
Xylia dolabriformis, *Berich.*
Acacia xylocarpa, *Willde.*

Pyangadeau ? BURM.
Pyn-kado. ,,
Pyeug-khadoe. ,,
Pingadoo. ,,
Yerool. CAN, ?
Janbay. ,,
Jamba mara. CAN.
Betada swamamki vriksha. CAN. ??
Iron wood of Arracan and Pegu. ENG.
Partridge wood of London. ENG.
Jamboo. HIND.
Jamba. MAHR.
Erool of Malabar.
Eruvalu maram. TAM.
Malei averei. ,, ??
Tangedu. TEL.
Konda Tangedu. Circars, TEL.
Boja of the Godavery.

This valuable timber tree is remarkable for its thick woody legume; it grows to a large size, is a stately tree which blossoms during the hot season, at which period it is nearly destitute of foliage, and is met with in many parts of Southern India, in varying abundance. It is abundant in the Walliar forests of Coimbatore, it is also abundant in North Canara, particularly between Sircee and Yellapore, and is not uncommon in the seaboard forests of the Bombay Presidency, south of Panwell. In Canara and Sunda, it grows chiefly above the ghats in Soopeh and Dandelee, where it grows large; and, there, its tough and strong wood is very useful in house-building. It is met with in the Godavery forests where it grows very large on the mountains, and much of it grows in the Vizagapatam district. Dr. McClelland says that, in the Southern forests of Pegu, it is a plentiful large tree, fifteen to eighteen inches in diameter, very lofty and straight, and would afford excellent spars for naval purposes, if not too heavy. It is most plentiful in Prome, especially so near the forks of the Tenasserim, and very abundant in Amherst, Mergui and Tavoy. In the Prome forests, it is usually about 6 feet in girth, but in all the other branches of the Tenasserim, it attains a larger size, frequently 8 or 9 feet. Dr. Brandis says it is abundant throughout the forests on and near the hills of British Burmah, and is, there, a magnificent tree. It is the *Ironwood* of Pegu. The sap-wood is attacked by white ants and decays easily, but it is very limited in large trees. The heart-wood of full-grown trees is said to last as long as teak. This wood would be invaluable if it were not for its weight. It is used, he says, for house and bridge posts, ploughs, boat anchors, in the construction of carts and for other purposes. A cubic foot weighs lbs. 60 to 66. In a full-grown tree on good soil, the average length of the trunk to the first branch is 50 feet, and average girth measured at 6 feet from the ground, is 9 feet. It sells, there, at 12 annas per cubic foot. This wood is of a very superior quality, everywhere; is dark-coloured, very hard and dense, strong and durable—but, in the Bombay Presidency, the tree does not grow straight to any size; and, there, it is not available for house or ship-building. An inch bar, of the Coimbatore wood, sustained lbs. 550. It is one of two Ironwoods of the Arracan provinces, the other being the I. bijemina. It resists nails, which cannot be driven into it. It is excellent for naves of wheels and for all purposes demanding great strength, such as crooks for ships—knees and bends, posts, piles and bridges: and it is excellent for railway sleepers and recommended for handles of chisels, gauges, &c., but is too heavy for other ordnance purposes. The hard wood is as impervious to white ants as teak, and is even more durable in the ground. Natives assured Dr. Mason that they had seen house-posts of this wood taken up after having stood forty years, and that the part which had been buried was as sound as new timber. That of the Godavery forests is described as yielding a valuable timber, and according to Dr. Roxburgh, the timber is remarkably strong and durable, but Mr. Rohde did not meet with it in the Circars exceeding a foot or 14 inches in diameter, and, then, always faulty in the centre; he also says that, in the Vizagapatam district, this wood is used for common purposes, but it is generally faulty in the centre, it is not a bad wood for furniture, is well adapted for handles of tools, &c., the average size at Vizagapatam is 12 inches in diameter and fifteen feet long; on the Godavery it is seldom obtained exceeding 8 inches in diameter and generally is faulty in the centre; it is used for posts. He thinks it a good wood for screens, framing of furniture, linings of drawers, tool handles, and generally for all purposes, for which a moderately hard, strong wood, not liable to split or cast about, is required. It would, thus, seem to be in general use in the various countries of British India and in the adjacent Island of Ceylon. In the Madras Gun Carriage Manufactory, it is used for poles, axle cases, and braces for transport limbers, poles and yokes for water carts, checks, axle cases for transport carriages, light mortar carts. Captain Puckle, writing from Mysore, says it is used for furniture, shafts, plough heads and knees, and crooked timbers in ship-building, and railway sleepers. It has been largely used on the Madras Railway. In a letter dated 1st September 1862, to Mr. R. B. Elwin, Agent and Manager, the Acting Chief Engineer, says, "From all I can gather, from the statistics furnished by the Engineers of the South-west Line, it appears that, as far as can be ascertained, the sleepers of Erool employed in the Railway exhibited a very fair durability. Those that were laid down on the Western Division, two years ago, do not now appear to show the least symptom of decay. If judiciously selected and thoroughly seasoned, there can be little doubt of their continuing serviceable for at least six years, and further experience may prove sleepers of this wood to possess still greater durability. It has been employed extensively for different purposes, among others, for piles, transoms and walling pieces. The piles of the temporary bridge over the Cuddlehoondy river, completed in the commencement of 1859, are of this timber, and appear to have stood well; and, though the sea-worm has perforated them on all sides, the damage done does not appear to extend below the sap-wood. In small scantlings, it is liable to split and warp under exposure to the weather. As an experiment, Mr. Lovell drove a small pile, 2 inches in section, and which was purposely selected free of sap, into the river at the site of the Kuddlehoondy bridge, and after an exposure of 18 months when cut up, it was found to be destroyed to a depth only of a ¼ of an inch. The horizontal timbers in this bridge which are also of Erool are perfectly sound, they were however coated with tar and appear to have been well seasoned previous to use. I have no doubt that, of all the timbers from the Indian forests, Erool will be found to hold a high place in respect of durability and general usefulness."—*Roxb.*, ii, 543, *Voigt*, 528, *Drs. Brandis, Wight, McClelland, Mason, Gibson, and Cleghorn in Conservator's Report, Captain Dance, Mr. Rohde, Calcutta and Madras Catalogues of the Exhibition of* 1862, *Captain Puckle and Colonel Maitland: Report of Acting Chief Engineer, Madras Railway, and Records of the Consulting Engineer, favoured through Mr. Elwin and Captain Prendergast.*

INHAYON? A tree of Akyab, furnishing a moderate-sized wood. It is plentiful, but not much used.—*Cal. Cat. Ex.* 1862.

INJIN PEWOO, BURM.

White Injin. ANGLO-BURM.

Found in abundance all over the provinces of Amherst, Tavoy and Mergui, of a maximum length of 22 feet and maximum girth of 2 cubits. It is very light and perishable, and only fit for firewood.—*Captain Dance.*

IRGULI, TAM., also Er-gulie, TAM. The name of a Ceylon tree, which is about fourteen inches in diameter and eight feet in height. It is not a useful wood.—*Edye on the Timber of Ceylon.*

IRON WOOD.

Pya of Akyab.	Eisenholz. GER.
Pieng ,,	Legno di ferro. IT.
Yserhout. DUT.	Lignum ferreum. LAT.
Iron Wood. ENG.	Naw. SINGH.
Bois de fer FR.	Plohierro. SP.

Iron wood is a commercial term, applied to a great variety of woods, in consequence of their hardness, and almost every country has an iron-wood of its own. The product of an evergreen tree, *Sideroxylon*, remarkable for the hardness and weight of its timber, which sinks in water, receives this name: it is of a reddish cast, and corrodes like iron. This tree grows chiefly in the West India islands, and is likewise very common in South America. *Mesua ferrea*, a tree furnishing one of the iron woods, and which, also, has received its specific name from the hardness of its wood, is a native of Ceylon and of the peninsulas of India, of Northern India, Malacca and of the islands, and perhaps M. pedunculata, likewise furnishes part of the timber known under this name. The timber of the *Metrosideros vera* of China, is called true iron-wood: the Chinese are said to make their rudders and anchors of it, and, among the Japanese, it is so scarce and valuable, that it is only allowed to be made use of for the service of their king. The iron-wood of southern China, however, is *Baryxylum rufum*; of the island of Bourbon, *Stadmannia sideroxylon*, and of the Cape of Good Hope, *Sideroxylon milanophlœum*, which latter is very hard, close-grained, and sinks in water. The Ceylonese also give the name to the wood of Maba buxifolia, and have also an iron-wood tree, known under the Singhalese name of "Naw," in the western provinces of Ceylon, perhaps the Mesua ferrea or Maba buxifolia. It is described as used for bridges and buildings. That of the Canara forests is from two species of Memecylon, and, on the Coromandel coast, the term is occasionally applied to the wood of the Casuarina equisitifolia: in Tenasserim, the term is applied to the woods of Inga xylocarpa and I. bijemina; and to that of a species of Diospyros. The iron-wood of Australia is from a species of Eucalyptus, and that of Norfolk island from the Notolæa longifolia. The iron-wood of Guiana is from the *Robinia panacoca* (of Aublet), that of Jamaica is the *Tagara pterota*, and *Erythroxylon aræolatum*, which is also called red-wood. *Ægiphilæa Martinicensis* and *Coccoloba latifolia*, are other West Indian trees, to the timbers of which the name of iron-wood has been applied. *Ostrya virginica*, called American hop horn-beam, has wood exceedingly hard and heavy, whence it is generally called iron-wood in America, and in some places lever-wood. Under the name of Iron-wood, two specimens were sent by the Calcutta Committee to the Exhibition of 1862. One of them Pya, *Vern.*, a tree of Akyab, grows to a moderate size, and is plentiful in the Sandoway and Ramree districts. The other Iron wood, Pieng, *Vern.*, also, a tree of Akyab, grows to a large size, and is very plentiful in Arrakan, its wood is very hard, and used for posts. Like the commercial terms, Cedar, Ebony, Rosewood, &c., &c., &c., this notice of the many trees, the timbers from which are termed "Iron-woods" will show the necessity for careful discrimination.—*Holtzappfel, Messrs. Faulkner, Mendis and McGil-livray, Drs. Bennett and Mason, Cal. Cat. Ex. of* 1862.

ISAUXIS ROXBURGHIANA, *Wight.*

Mendora. SINGH.

A well known and justly valued timber tree. It produces a quantity of gum-resin. This must not be confounded with *Hal*, or *Gal-Mendora*, which belong to the Leguminosæ. *Na-Mendora*, is a name invented by the contractors for Caltura bridge.—*Mr. Fergusson.*

ISCARASI KARRA, TEL., Iscarasi wood, ANGLO-TEL. of the Northern Circars, is probably from the Sapindus rubiginosus.

ISONANDRA. A genus of large trees, growing in Ceylon, and in the two peninsulas of India. Dr. Wight, in Icones, has, I. candolleana, 1220; lanceolata, 359; percha, 1589; perottetiana, 1219; polyandra, 1589, and villosa, 360. Thwaites mentions, in Ceylon, I. canaliculata, *Thw.*, a middle-sized tree in the Caltura district; I. grandis, *Thw.*, a large tree of the central province and Saffragam districts, from the seeds of which an oil is extracted and which is used similarly to that of the Bassia longifolia. He also names I. lævifolia; pauciflora; rubiginosa and Wightiana, as trees of moderate and large size.—*Dr. Wight, Thw., En. Pl. Zeyl.*

ISONANDRA GUTTA, *Hook.*

Mazer wood tree. ENG.
Niato: MALAY.

The Gutta-percha tree is a native of the Malayan Archipelago, to which it is almost confined, and produces the Percha which is as indestructible by chemical agents as caoutchouc. The timber of this large tree is not known.

ITTI, Arali, Porrel, or Attu, Itti, according to Edye, are the Malayala names of a Malabar and Canara tree which grows to about forty feet in height, and two feet in diameter; it is used by the native carpenters for the planks of vessels, and is said by them to be a valuable wood. Thist ree, the Hindu people worship and respect, and consider of great importance and value.—*Edye, Forests of Malabar and Canara.*

IXORA, *Species.*

Tella kooroowan. TEL.

A common tree of Ganjam and Goomsur; extreme height 20 feet, circumference 1 foot, height from ground to the intersection of the first branch, 6 feet. The fire-sticks used by the shikarees for night-hunting are taken from this tree. It also yields an oil which is applied to the sores of cattle. It seems to be I. parviflora.—*Captain Macdonald, Dr. Cleghorn.*

IXORA PARVIFLORA, *Vahl.*

Ixora alba, *Roxb.*
" pavetta, *Andr.*
" decipiens, *DC.*
Webera corymbosa, *Sm. Herb.*

Gundhal Rungun. BENG.
Henna gorivi. CAN.
Torch Tree. ENG.
Gandhul? HIND.
Runghun.? "
Jilpai. "
Koora. MAHR.
Maha Ratam bala. SINGH.
Sowendee cuttay. Tam. of Ceylon.
Karan cuttay. Tam. of Ceylon.
Soowndee cottay. TAM.
Karang cottay. "
Koree. Godavery. TEL.
Korimi pala? "
Korivi pala. Circars TEL.
Komma chettu. "
Putta pala. "
Tedda. " "
Tada pallu. "

A small tree, not uncommon in many parts of India. It is common in the jungles and on the ghats of the Bombay coast; but is, there, seldom sufficiently long or straight for household purposes. It is met with in the Godavery forests and in the Circars. It grows at Nagpore and in Bengal, and on the banks and near tanks at Kotah; the flowers are pure white, are very sweetly scented, and it blossoms in the hot weather; it would form a very fit ornament for gardens and pleasure-grounds. It furnishes a hard but very small wood, rather of good quality, which is sometimes used for beams and posts in the houses of the poor of the Madras presidency; but, throughout India, it is more used for torches than for any other purpose, as it burns very readily and clearly, and on that account its branches are often made into torches by people travelling at night.—*Roxb.* i, 383, *Voigt, Gibson, Ainslie, Irvine, M. E. J. R., Captain Beddome, Flor. Andh., Roxb., Mr. Fergusson.*

J

JACK WOOD, ENG. Artocarpus integrifolia, LAT.

Phunsi. GUZ.
Funsi. "
Phunnas. HIND.
Fuss? HIND. MAHR.
Nangka. MALAY.
Uram Pila. MALEAL.
Pilla marain. TAM.
Viram pila "

In many places the tree is found two feet and a half in diameter, and from thirty to thirty-five feet high. In Canara, this wood was preferred by Tipu Sultan for the grab vessels built at Onnoor, his naval depôt. In Ceylon, at Point de Galle, it is used by the furniture makers for chairs, couches, &c., for which purpose it answers well; and, if polished with care, its brilliant colour is superior

CSL

to that of mahogany. When worked and cut down, it is yellow, but turns dark and improves by age.—*Edye, Forests of Malabar and Canara.* *See* Artocarpus integrifolia.

JAMBAU, the name of a tree in Canara which grows from two to four feet in diameter, and from twenty-five to forty feet in height. This wood, as also the Kulbagi, is very scarce. It very much resembles mahogany, and is generally used for house furniture.—*Edye, Forests of Malabar and Canara.*

JAMBOSA AQUEA, *D.C.—W. and A. Roxb., W. I.*

Eugenia (J.) aquea, Wight, Illustr.
Eugenia sylvestris, Moon's Cat.
Jambo. Beng. | Wal-jambo-gass. Singh.

A small tree abundant in the Central Province of Ceylon, up to an elevation of 5,000 feet. Wood white and soft.—*Thw. En. Pl. Zeyl*, *p.* 115, *Mr. Fergusson.*

JAMBOSA CYLINDRICA ?

Eugenia (J.) cylindrica, Wight, Icones.
Eugenia (J.) pauciflora, Wight, Icones.

A moderate-sized tree of the Ambagamowa district in Ceylon, up to an elevation of 3,000 feet.—*Thw. En. Pl. Zeyl., II, p.* 115.

JAMBOSA SALICEFOLIA ?

Pan Jambool. Mahr.

A crooked species of jambool, growing much on the rivers of the Bombay Deccan districts. The stem is generally useless for house purposes, on account of its crookedness, but the straight shoots are eagerly sought after as rafters.—*Dr. Gibson. See* Eugenia salicefolia.

JAPAN TIMBER TREES, many of the timber trees of Japan were noticed by Thunberg during his residence, there, nearly a hundred years ago. The most recent notice of the plants of that island is in *Hodgson's Nagasaki, pp.* 342–43 and their names, alphabetically arranged are as under :—

Abies tsuga, *S. & Z.*
,, (Picea) firma *S. & Z.*
,, (Picea) homolepis, *S. & Z.*
,, microsperma, *Lindl.*
,, Veitchii, *Lindl.*
,, Alcoquiana, *Lindl.*
,, bifida, *S. & Z.*
,, jezoensis, *S. & Z.*
,, Smithiana, *Loud. (polita, S. & Z.)*
Acer distylum, *S. & Z.*
,, palmatum, *Thunb.*
,, carpinifolium, *S. & Z.*
,, cratægifolium, *S. & Z.*
,, rufinerve, *S. & Z.*
,, micranthum, *S. & Z.*
,, japonicum, *Thbg.*
,, pictum, *Thbg.*
,, polymorphum, *S. & Z.*
,, sessilifolium, *S. & Z.*
,, dissectum, *Thunb.*
,, *two species undescribed.*
Aceranthus diphyllus, *Dcne.*
,, sagittatus, *S. & Z.*
Ægle sepiaria, *L. (Citrus trifolia, Thbg.)*
Æsculus chinensis, *Bunge.*
,, turbinata, *Blume.*
,, dissimilis, *A. Gray*

Alnus firma, *S. & Z.*
,, japonica, *S. & Z.*
,, viridis, *DC.*
Antidesma japonicum, *S. & Z.*
Ardisia crispa, *A. Dl.*
,, glabra, *A. Dl.*
,, japonica, *Bl.*
,, pusilla, *A. Dl.*
Berberis Thunbergii, *DC.*
,, vulgaris, *Thbg.*
,, japonica, *S. & Z.*
Betula grossa, *S. & Z.*
,, carpinifolia, *S. & Z.*
,, ulmifolia, *S. & Z.*
,, japonica, *Sieb.*
Boymia rutæcarpa, *A. Juss.*
Broussonetia papyrifera, *Vent*
,, Kampferi, *Sieb.*
,, Sieboldii, *Bl. (kasinoki, Sieb.)*
Carpinus erosa, *Bl.*
,, cordata, *Bl.*
Castanea vesca, *Gærtn. var.*
,, japonica, *Blume.*
,, crenata, *S. & Z. (japonica, var. crenata, Bl.)*
,, stricta, *S. & Z. (japonica, var. stricta, Bl.)*

Castanea chinensis, *Spr. (cult.)*
Calophyllum thalictroides, *(Mich.)*
Celastrus articulatus, *Thb.*
,, punctata, *Thbg.*
,, orixa, *S. & Z.*
,, striatus, *Thbg.*
Celtis Willdenowiana, *Roem.*
,, sinensis, *Pers.*
,, Muku, *Sieb.*
Cephalotaxus umbraculifera, *Sieb.*
,, drupacea, *S. & Z.*
,, pedunculata, *S. & Z.*
,, Fortunei, *Hook.*
Citrus japonicus, *Thbg.*
,, aurantium, *L.*
,, decumana, *L.*
Ceraseidos apetala, *S. & Z.*
Cordia thyrsiflora, *S. & Z.*
Corylus heterophylla, *Fisch.*
,, Sieboldiana, *Bl.*
Cryptomeria japonica, *Don.*
Canninghamia sinensis, *R.Br.*
Cycas revoluta, *L. Thbg.* β. prolifera, *S. & Z.*
Diospyros kaki, *L.*
,, japonica, *S. & Z.*
Diphylleia cymosa, *Mich.*
Distegocarpus carpinus, *S. & Z. (Carpinus japonica, Bl.)*
,, laxiflora, *S. & Z. (Carpinus, Bl.)*
Elæagnus macrophylla, *Thbg.*
,, umbellata, *Thbg.*
,, pungens, *Thbg.*
,, longipes *A. Gray.*
,, reflexa, *Moer. and Dcne.*
,, glabra, *Thbg.*
,, crispa, *Thbg.*
,, multiflora, *Thbg.*
Elæocarpus photiniæfolius, *Hook.*
,, japonicus, *S. & Z.*
Elæodendron, *Sp.*
Epimedium Muschianum, *DC*
,, macranthum, *Dcne.*
,, violaceum, *Dcne.*
,, Ikariso, *Sieb.*
Euonymus japonicus, *Thb.*
,, Sieboldianus, *Blume*
,, Thunbergianus, *Bl. (Celastrus alatus, Thbg.)*
,, *Melanocarya, alata, Turcz.*
,, subtriflorus, *Blume.*
,, Hamiltonianus, *Wall*
,, latifolius, *Mill ?*
Euptelea polyandra, *S. & Z.*
Euscaphis staphyleoides, *S. & Z.*
,, simplicifolia, *S. & Z.*
Evodia ramiflora, *A. Gray.*
Fagus sylvatica, *L.*
,, crenata, *Blume.*
Fatoua aspera, *Gaud.*
,, pilosa, *Gaud.*
Gardneria nutans, *S. & Z.*
Glyptostrobus pendulus, *Endl*
Homoioceltis aspera, *Bl.*
Ilex crenata, *Thbg.*
,, microphylla, *Bl,*
,, integra, *Thbg.*
,, latifolia, *Thbg.*
,, rotunda, *Thbg.*
,, serrata, *Thbg.*
,, aquifolium, *L.*
,, *var.* heterophylla.
Juglans, 3 sp.
Juniperus rigida, *S. & Z.*
,, taxifolia, *Hook.*
,, chinensis, *L.*
,, procumbens, *Sieb.*
Koelreuteria paniculata, *Laxm*
Larix leptolepis, *Sieb.*
Maclura gerontogea, *S. & Z.*
Mæsa Doraena, *Bl.* (*Doraena japonica, Thbg.*)
Melia Azederach, *L.*
,, Toosendan, *S. & Z.*
,, japonica, *Don.*
Metrosideros. Sp. *S. & Z.*
Morus alba, *L. Thbg.*
,, Indica, *L. Thbg.*
,, japonica, *Sieb.*

Myrica rubra, *S. & Z.*
Myrsine neriifolia, *S. & Z.*
Nandina domestica, *Thbg.*
Pinus densiflora, *S. & Z.*
,, Massoniana, *Lamb.*
,, parviflora, *S. & Z.*
,, koraiensis, *S. & Z.*
,, sinensis, *Lamb.*
,, pinaster, *Ait. (cult. ?)*
Piptosacca hypophyllantha, *Turcz.*
Platycarya strobilacea, *S. & Z. (Fortunea Chinensis, Lindl.)*
Podocarpus macrophylla, *Wall*
,, *Maki, S. & Z. (Chinensis, Wall.)*
,, Koraiana, *Sieb.*
,, nageia, *R. Br.*
,, japonica, *Sieb.*
,, cuspidata, *Endl.*
,, grandifolia, *Endl.*
Populus, *Sp.*
Prunus Persica, *L.*
,, padus, *L.*
,, paniculata, *Thunb.*
,, Mume, *S. & Z.*
,, japonica, *Thbg.*
,, tomentosa, *Thbg.*
,, spinulosa, *S. & Z.*
,, macrophylla, *S. & Z.*
,, pseudo cerasus, *Lindl.*
Pterocarpus sorbifolia, *S. & Z.*
,, rhoifolia, *S. & Z.*
Pterostyrax corymbosum, *S. & Z.*
,, micranthum, *S. & Z.*
,, hispidum, *S. & Z.*
Punica granatum, *L.*
Quercus glabra, *Thbg.*
,, acuta, *Thbg.*
,, glauca, *Thbg.*
,, cuspidata, *Thbg.*
,, serrata, *Thbg.*
,, glandulifera, *Blume.*
,, dentata, *Thbg.*
,, phyllyraoides, *A. Gray.*
,, Sieboldiana, *Bl.*
,, urticæfolia, *Bl.*
,, canescens, *Bl.*
,, variabilis, *Bl.*
,, aliena, *Bl.*
,, crispula, *Bl.*
,, Burgerii, *Bl.*
,, sessifolia, *Bl.*
,, salicina, *Bl.*
,, myrsinæfolia, *Bl.*
,, gilva, *Bl*
,, grosseserrata, *Bl.*
,, lacera, *Bl.*
,, marginata, *Bl.*
,, lavigata, *Bl.*
Retinispora obtusa, *S. & Z.*
,, ericoides, *Zucc.*
,, pisifera, *S. & Z.*
,, squarrosa, *S. & Z.*
Rhodomyrtus tomentosa, *DC.*
Rhus semialata, *Murr.*
,, Javanica, L. *(cult.)*
,, succedanea, *L.*
,, sylvestris, *S. & Z.*
,, vernicifera, *DC.*
,, toxicodendron, *L. var.*
Salisburia adiantifolia, *S. & Z.*
Sapindus Mukorossi, *Gærtn.*
Salix japonica, *Thbg.*
,, alba, *L.*
,, subfragilis, *Anders.*
,, purpurea, *L.*
,, padifolia, *L.*
,, viridula, *Anders.*
,, vulpina, *Anders.*
,, acutifolia, *W.*
,, Sieboldiana, *Blume.*
,, integra, *Thbg.*
,, Babylonica, *L.*
Sciadopitys verticillata, *S. & Z.*
Skimmia japonica, *Thbg.*
Spiræa callosa, *Thbg.*
,, chamædrys, *Thbg.*
,, *(S. Reevesii.)*
,, Thunbergii, *S. & Z.*
,, prunifolia, *S. & Z.*
,, chamædryfolia, *L.*
,, japonica, *Sieb.*
,, betulæfolia, *Pall*

Spira[illegible]nata, *Thbg.*
„ aruncus, *L.*
„ salicifolia, *L.*
Sponia nudiflora, *S. & Z.*
Staphylea Bumalda, *S. & Z.*
Sterculia japonica.
Styrax japonicum, *S. & Z.*
„ obassia, *S. & Z.*
Symplocos japonica, *DC.*
„ prunifolia, *S. & Z.*
„ myrtacea, *S. & Z.*
„ lancifolia, *S. & Z.*
„ leptostachys, *S. & Z.*
„ theophrastæfolia, *S. & Z.*
Symplocos neriifolia, *S. & Z.*
Taxus cuspidata, *S. & Z.*
„ adpussa, *Knight.*
Tecoma grandiflora, *DC.*
Thuja orientalis, *L.*
„ excelsa, *Bong.*
„ pendula, *Lamb.*
Thujopsis dolabrata, *S. & Z.*
Torreya nucifera, *S. & Z.*
Ulmus parvifolia, *Jdcq.*
Xanthoxylum piperitum, *DC.*
„ schinifolium, *S. & Z.*
„ ailanthoides, *S. & Z.*
„ planispinum, *S. & Z.*
Zanthoxylum serrulatum, *Bl.*

Hodgson's Nagasaki, p. 342,3.

JAREREE. A thorny shrub of Jhullundhur used for fences.—*Lieut.-Col. Lake, Commissioner, Jhullundhur Division.*

JATI, MALAY. A wood of the Archipelago, much used in making prahus and in house-building at Bawean. (*Note.*—Is it the teak, Tectona grandis ?)

JAVA TIMBER. In the time of Sir S. Raffles, notwithstanding the extent to which cultivation had been carried on in many districts of the island, large portions of its surface, were still covered with primeval forests, affording excellent timber of various descriptions.

" *Jati,*" extensive forests of the *Jati*, or teak of India are found in almost all the eastern provinces. The teak tree grows in Java at a moderate elevation above the level of the ocean.

Besides teak, several kinds of wood or timber are employed for various domestic purposes, as

" *Bendo,*" a light wood, useful for canoes.

" *Bintungan*" wood is employed in the same manner as " Wadang," but grows to a larger size ; the colour of the wood and bark is red.

" *Demole*" tree affords a light wood, which is made into planks, and employed where durability is not much required.

" *Janglot*" wood is considered by the natives as the toughest wood produced in the island, and is always employed for bows when procurable : the tree is of a moderate size.

" *Jaran,*" is a white wood taking the tool easily : the natives prefer it to all others for the construction of their saddles, which consist principally of wood.

" *Kedawung*" wood is whitish and moderately hard.

" *Kelumpit,*" is a very large tree : sections are employed by the natives for cart wheels.

" *Kusambi*" wood is uncommonly heavy, hard and close : it supplies anchors for small vessels, blocks, pestles, and numerous similar utensils.

" *Laban,*" is a yellowish and hard wood, employed for the handles of axes and various utensils.

" *Lampean*" or " *laban*" wood, is light but durable, and affords materials for the handles of the spears or pikes borne by the natives.

" *Luren*" wood resembles the *nangka*, but is generally of rare occurrence, though in some tracts it furnishes the only timber : its use in the neighbouring islands, particularly in Sumatra, is well known.

" *Nangka*" trees abound in several districts where teak is not found, and is almost exclusively used in the construction of houses, and for other domestic purposes : the wood is more close and ponderous than the *suren*, which it otherwise resembles ; it takes a tolerable polish, and is sometimes employed for furniture. The colour is yellow ; but it is made to receive a brownish hue, by the application of the young teak leaves in polishing : its bark is used as a yellow dye.

" *Pilang,*" is a very hard wood, and employed in the eastern districts, instead of lignum vitæ, for the construction of ships' blocks, &c.

" *Pung*" is equally hard with *pilang*, and uniformly employed by the natives for pegs in constructing their prahus.

" *Sentul,*" is a light close-grained wood, and easily worked : it resembles the *suren*.

" *Sawur,*" is a very beautiful and useful wood : the colour resembles that of mahogany, but the grain is closer, and it is more ponderous : its chief use is for handles of tools for carpenters and other artificers, for machinery, especially for the teeth of the wheels of mills, and other purposes where a hard and durable wood is required. On account of its scarcity, it is uniformly cut down in Java before it arrives at the necessary size for cabinet work. Forests of it grow on the hills of *Bali*, opposite the Javan shore, whence it is brought over by boat-loads for sale.

" *Suren*" the tuna of Bengal, of which the wood is very light, stronger, and more durable than all other kinds of similar weight produced on the island : as the grain is not fine, it is not employed in making furniture, but it is useful for chests, trunks, carriages, &c. : its colour is red, and its odour somewhat resembling that of the cedar. Its weight is probably inferior to that of the larch. (*Qu.* Is this the Cedrela tuna ?)

" *Tang gulun,*" is a hard wood of a close-grain, and employed by turners for various small works.

" *Wadang*" or " *bayur*" wood, a light and tolerably durable wood, is employed for masts and spars of small vessels ; but the surface must be well covered with resinous substances to prevent it splitting.

“ *Wali kukun*” wood is equal to the kusambi in weight, and exceeds it in hardness: it is employed for anchors, naves of wheels, machinery, &c.

“ *Wungu*” or “ *Ketangi*” wood is often used instead of teak : the grain is somewhat finer : when in full blossom, it is perhaps the most beautiful tree existing.

For household furniture, cabinet-ware, &c., are employed.

“ *Ingas*,” of a brownish-red colour, and very brittle.

“ *Krandu kuning*,” yellowish and close-grained.

“ *Mentaus*” and “ *Jumberit*,” the wood of which is white and fine grained, uniformly used for inlaying.

“ *Pronosoda*,” resembling the walnut, but scarce. *Warm lot*, is brown.

“ *Sono kling*” of the *Malayas*, the colour of which is a deep brown, inclining to black.

“ *Sono kombang*,” which has some resemblance to the *lingoa* wood of the Moluccas.

“ *Wern*,” of a brown colour, of a close substance and light, abundant in some districts.

For the hilts and sheaths of krises, the natives make use of the “ *timoko*,” of which the black and white variegated fragments are called “ *pelet*.” There are various kinds.

“ *Aruman*,” variegated white and black, is also employed for canes, handles and spears, &c., and is very heavy.

“ *Kamuning*,” is of a brownish colour and very fine grain.

“ *Mangu*,” the *ati ati*, the “ *kraminan*,” the *purwo-kuning* and several others, are employed for the same purposes.

“ *Tayuman*,” resembles kamuning and is very much esteemed.

Wuni stelago affords a reddish wood.

“ *Ttike*,” yellowish, close and marbled.—*Raffles' His. of Java*, *Vol. I.*, 40 *to* 42.

JEMBU NERLU, Can. ? A wood of South Canara.—*Mad. Cat. Ex. of* 1862.

JHOONTIAH, Uria ? A tree of Ganjam and Goomsur. Extreme height 45 feet, circumference 4½ feet, and height from ground to the intersection of the first branch, 15 feet. A hard, white wood, used chiefly for making hair combs and small boxes. It is tolerably common.—*Captain Macdonald.*

JIOMRASSEE. Botanical name not known. A tree of Jubbulpore, with a beautiful close-grained wood, the leaf oblong, and serrated edge ; it is found in the more hilly tracts but does not attain any great size.—*Cal. Cat. Ex.* 1862.

JOGHY, Can. A wood of Mysore.

JONESIA ASOKA, *Roxb. W. et A.*

Jonesia pinnata, *Willde.*
Saraca arborescens, *Burm.*
Saraca Indica, *Linn.; Rh.*

Ushok. Beng.
Deya ratmal. Singh.
Dive ratembela. Singh.
Oshoko. Uria.

Met with in Ceylon, on the sides of streams, under the shade of larger trees, up to an elevation of 3,000 feet, and is very abundant in the Bintenne district. It is a highly ornamental tree, is found on the Coromandel coast, at the Ramghat, on the Khassia hills, Assam and Martaban. According to Mr. Mendis, the timber of Dive ratembela, in the northern parts of Ceylon is used for common house-building purposes, its weight per cubic foot is 58 lbs., and it is esteemed to last 25 years. In Madras its timber is not available.—*Roxb.* ii, 218, *Voigt : Thw., Dr. Cleghorn in M. E. J. R.*

JOREE, Uria ? A tree of Ganjam and Goomsur. Extreme height 60 feet, circumference 5 feet, and height from ground to the intersection of the first branch, 8 feet. Bandy-wheels are occasionally made of its wood, which is also burnt for firewood. The seeds are eaten by the Khonds. The tree is tolerably common.—*Captain Macdonald.*

JUBBULPORE WOODS. *See* Central Provinces.

JUGLANS REGIA, *Linn.*

Thit kya. Burm. ?
Royal Walnut tree. Eng.
Walnut tree. ,,
Common Walnut tree. ,,
Basilicon. Greek.
Caryon. ,,
Persicon. ,,
Akrot. Hind.
Jaoz. Pers.
Charmagz. ,,
Akrot. ,,
Ka of Sutlej & Kanawar.
Dun of Kashmir.
Waghz. Pashtu.
Than, also Thani of Chenab and Lahoul.

Dr. Stewart gives khor, akhor, ka-botang, darga, starga and ughz as other names vernacular in the N. W. Himalaya. This noble tree, though not a native of Europe, was extensively cultivated in Greece and Italy, at a very early period. Its most ancient names were Persicon (Persian tree), and Basilicon (Kingly tree), both indicating its eastern origin. The Greeks also called it Caryon, from *kara* a head, because its powerful odour was supposed to cause headache, or from some fancied resemblance between the nut and the human head. The Romans, to mark the estimation in which they held it, gave it the name of Juglans, or Jupiter's mast, from its being as much superior to other kinds of mast, as their god—Jupiter, was supposed to be superior to men. This is met with wild but common planted in the N. W. Himalaya, from 5,000 to 10,000 ; and in Thibet to 11,000 feet, but in the plains at 3,500 feet. It also grows west of the Indus, in Affghanistan and Beloochistan. It grows in Ghilan and in the north

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of China, and three species of this genus grow in Japan. It grows wild in Tartary, where a single tree is said to produce as many as from forty to sixty thousand nuts yearly. A sample of the walnut tree wood was sent to the Exhibition of 1862 from the Mehra Forest, near Abbottabad, Hazara, It is largely cultivated in Jhullundhur. As a timber tree, the walnut holds a high rank: in young trees the wood is white and comparatively soft; but in full-grown trees it becomes compact, and of a dark-brown colour, beautifully veined and shaded with light-brown and black. Before the discovery of mahogany it was much used for furniture, and many a curiously wrought cabinet or book-case is still to be found in old-fashioned houses; its principal use, however, at the present time, is for gunstocks, for which it is admirably adapted, combining the necessary qualities of lightness and strength, and being at the same time not liable to warp. The wood of an old tree is dark, hardish and strong, and takes a good polish. It does not warp, is made into gun-stocks, cabinet-work, and the shelves of the Kallam painted boxes are made of it. The fruit ripens in August and forms a large part of the food of the people.—*Dr. J. L. Stewart, p.* 201, *Lt. Col. Lake, Powell, Hand-book, John's Forest trees of Britain, Vol. I., p.* 162.

JUGLANS TRICOCCA, *McLelland.*

Ta-soung-let-wah. BURM.

Scarce, but found on the banks of the streams in the Pegu district. It is a hard, strong timber. Wood white colour and adapted for every purpose of house-building.

JULOSTYLIS ANGUSTIFOLIA, *Thw.*

Kydia angustifolia, *Arn.*

A middle-sized tree of the south of Ceylon, not uncommon.—*Thw. En. Pl. Zeyl., Part I., p.* 30.

JUNIPERUS EXCELSA, *Bieb.*

J. arborea.

Pencil cedar. ENG.
Leuri or Suri of Sutlej.
Charai or Chalai of Kaghan.
Dhup of Kaghan.
Devidear of Panjab.

Apurs of Panjab.
Shukpa or Yukpa or Pratakpa. TIBETAN.
Shur; Shurghu; Lewar; Mewar of Kanawar.
Shur; Lewar of Chenab.

Abundant in Nepaul, occurs in Kumaon in the basins of the Sutlej and Chenab; in Ladak, on the Safed Koh and the Chahaltan in Beloochistan at elevations of 8,000 to 15,000 feet, and is in size 4 to 19 feet in girth and 26 to 46 feet high. Its timber is variously reported on, seemingly the result of describing the inner and outer woods. Dr. Stewart says the timber is fragrant and light, but not strong. Its heart-wood when in moist earth, is nearly imperishable, and it is much employed for water-channels and in Lahaul for the walls of houses; on the Sutlej for beams, vessels, boxes and temples; and in Ladak it is sacred. Mr. Powell says it is an excellent, hard, light wood, used for house and bridge-building in Lahaul. Its strong fragrant odour keeps off insects. Fifty logs were brought down the Chenab in 1862, and readily bought up at Sealkote for cabinet purposes. This is stated by Dr. Cleghorn, but Mr. Powell has been told that the timber is useless for such purposes. It is the principal tree in the upper part of the Sutlej valley and in Lahaul. It forms small forests, especially on the southern slopes of the hills, at an elevation of from 9 to 12,000 feet. The tree seldom attains 30 feet in height and 6 feet in girth, but Dr. Thompson mentions one perhaps 40 feet high; and Dr. Cleghorn measured one below the monastery at Hyelang, 13 feet in girth. In Kághan, one tree seen was 14 feet; and one near Lulusar, 19 feet in girth. In Dr. Stewart's "Chenab Report," much larger sizes are mentioned, viz., 30 and 33½ feet; the trees were very stunted in height however, and had to contend with the heavy snow-falls. The bark is red, separating into laminæ like birch, and apparently a good material for brown paper. Jacquemont (Voyages, II. 373.) mentions "that vessels are made of this wood for carrying milk and water in Kanawar."—*Dr. J. L. Stewart, page* 224, *Powell, Hand book,*

JUNIPERUS SQUAMOSA. THE CREEPING JUNIPER.

Pama also talu. PANJ.
Theli of Kanáwar.
Harang of Pangi.

Pethri of Kághan.
Bethal, pethal of Chenab, &c.

Used as fire-wood on the high passes of the N. W. Himalaya, where it grows at from 12,000 to 13,000 feet. To distinguish J. squamosa from J. communis the plant with the long scales is J. squamosa, and that with short ones is J. communis.

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KAANTHA, Burm. A small but valuable wood of Tavoy.

KAB-BAN-THA, Burm. A timber tree of a maximum girth 6 cubits, and maximum length 30 feet, found inland in Amherst and Tavoy Provinces, but scarce. When seasoned, it floats in water. It makes beautiful furniture, and when long buried in ferruginous mud, turns of a *very dark* red. It is found to make excellent planes; and is used in Tavoy jail with great success, for all tool handles, and much recommended for such as do not receive direct percussion, as screwdrivers, augers, hammers, handles—in fact, for all tools except chisel handles, which are to be struck with a hammer, for which the chisel-handle tree, a species of "Dalbergia" is the best. It is stated by Dr. McClelland to be most plentiful in Tharawaddy district, and to be hard, of fine grain, and used in constructing carts. Captain Dance says a quantity of this sold in August 1857, for export to Holland, as a furniture wood.—*Captain Dance, Dr. McClelland.*

KACHNAR, Hind. A tree of Chota Nagpore, with a soft, white wood.—*Cal. Cat. Ex.* 1862.

KADOEM-BEIRIYE. Bastard Ebony, a generic name for several species of Diospyros, of the Western Province of Ceylon; weight per cubic foot 45 lbs., durability 40 years, used for furniture. The heart of this wood is occasionally met with of extraordinary beauty.—*Mr. Mendis. See* Diospyros.

KADUKAI MARAM, Tam. A Coimbatore wood. *See* Pillay murdah.

KAD-WOT-NU, Burm. Cedrela, *sp.*? A Tavoy wood, used for house and ship building; a large timber, 40 to 70 feet, specific gravity 1·060.

KADDA PILOW, Tam. According to Edye, name of a tree, which is the river side Jackwood. It is inferior to the wood of that name: the natives use it for inferior purposes in small pattamahs and coasting vessels. It is not of much value.—*Edye, Forests of Malabar and Canara.*

KAETA-TOWA, a tree of New Zealand, belonging to the myrtle family. It grows alike on elevated as on low lands and attains an elevation of 25 to 30 feet, but is seldom more than 3 or 4 feet in circumference. The wood is hard and heavy, and is used for making the Patu-Patu or war club, paddles and other articles requiring strength and durability. —*Bennett's Wanderings, p.* 415.

KAHLARU, the Malayala name of one of the jungle trees. It grows to about seventeen feet in height, and seven inches in diameter; is very hard, close-grained, and strong; and is used by the natives in boats and for timbers and knees in vessels.—*Eyde, Forests of Malabar and Canara.*

KAI-HU-YUD, Coch-Chin. Sandalwood.

KAIMAL. This tree of Jhullundhur grows to the height of 15 feet and more, with a good girth; wood of old tree is red, the outer wood is alone subject to worms; used for door frames and putaos.—*Lt. Col. Lake, Commissioner, Jhullundhur Division.*

KAINTH. A wild fruit tree of Jhullundhur, known as the wild medlar; wood hard, used for agricultural implements.—*Mr. Barnes' Kangra Settlement Report, page,* 158 *quoted by Lt. Col. Lake, Commissioner, Jhullundhur Division.*

KAJAW, the Malayala name of a tree which grows to about eight feet in height, and ten inches in diameter; it is very strong, and the crooks of it are used by the carpenters for boat-work.—*Edye, Forests of Malabar and Canara.*

KALA-NATH, Hind. ? Cerasus, *Species.* A species of wild cherry of Mehra forest, near Abbottabad, Hazara.—*Cal. Cat. Ex.* 1862.

KALAT NOTHEE? A tree of Akyab, grows to a large size, and is plentiful in the Akyab and Ramree districts. Wood used in house-building.—*Cal. Cat. Ex.* 1862.

KALAYUM in Tamil, and Condle in Malayalam. This tree grows from ten to fifteen feet in length, and from twelve to eighteen inches in diameter; its branches at the top are very thick; the wood is of a reddish cast, and much like the pencil cedar; it grows on the banks of rivers, but is not of much value for any purpose. The tree produces a useless fruit.—*Edye, Forests of Malabar and Canara.*

KALLOW MOW, the Malayala name of a tree which grows to about sixteen inches in diameter, and twenty feet in height. It produces a nut which is food for monkeys and other animals of the forest: the wood is used for various purposes, but is of little value.—*Edye, Forests of Malabar and Canara.*

KALOOCHIA, Uria? A tree of Ganjam and Goomsur, of extreme height 25 feet, circumference 2½ feet, and height from ground to the intersection of the first branch, 12 feet. It is used for posts and ploughshares and

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bu[illegible] for firewood. It is a common tree.—*Captain Macdonald.*

KALUDUMUM, the Tamil name of a tree which is remarkably heavy and very close-grained, and much resembles the English pear tree wood ; it grows to about eighteen inches in diameter, and from twelve to fifteen feet long : it is used for purposes where strength is required. Edye imagined it to be not very durable, or that it is not to be procured in any quantity, as it was but little known.—*Edye, Forests of Malabar and Canara.*

KAMALAH, the Tamil name of a tree which very much resembles the wood in Ceylon named Halmilile and Somendille ; its growth is about thirty-feet long, and two feet in diameter ; it is used for much the same purposes as the other jungle woods, in vessels and house-work ; and the crooks are similar to the last named.—*Edye, Forests of Malabar and Canara.*

KA MEEN THA, Burm. A tree of Amherst, Tavoy and Mergui ; maximum girth 2 cubits, maximum length 25 feet. Abundant all along the sea-coast near Tavoy and Mergui. When seasoned it sinks in water. It is used for posts and planks of houses ; is very heavy and durable, but too easily split to be recommended.—*Captain Dance.*

KARNENE-WAEH, the Tamil name of a tree which is very close-grained and heavy. It is used for the frames of native vessels, and is considered a good strong wood. It grows to eighteen inches in diameter, and twelve to fourteen feet in height.—*Edye, on the Timber of Ceylon.*

KA-MOUNG? A tree of Akyab, grows to a large size, and is plentiful. Wood used for planks, posts, &c.—*Cal. Cat. Ex.* 1862.

KANARI. A large handsome tree, one of the most useful productions of the Archipelago, and introduced to Celebes and Java. Its wood is not known. It bears a nut of an oblong shape, nearly the size of a walnut, the kernel of which is as delicate as that of a filbert, and abounds with oil. The nuts are either smoked and dried for use, or the oil is expressed from them in their recent state. It is used for all culinary purposes and is purer and more palatable than that of the coconut. The kernels are mixed up with a little sago-meal and made into cakes and eaten as bread.—*Crawfurd, Simmond's Comml. Products, page* 546.—(*Note.*—Is this Aleurites triloba ?)

KA NAT THA, Burm. A tree of Moulmein, the wood of which is made use of for ordinary house-building purposes.—*Cal. Cat. Ex.* 1862.

KANDESH, the Kokurmundah Pehta jungles occupy a considerable area and are flanked on the north and west sides by the Sagbarah, Gorwallee and Mutwar Forests. The three latter are independent States, all the produce of which passes through the Kokurmundah Pehta jungles, Zillah Candeish, *viâ* Tulloda and Shejda. These latter forests contain large quantities of junglewood and some teak which Dr. Gibson thought should be turned to account in the shape of revenue. The Sagbarah jungles have been extensively worked for several years : the timber is small but of good quality. Many of these jungle varieties of wood must and will be used for sleepers in the construction of the railway though the province of Candeish, and the nearest jungle, Kokurmundah, would be the first cut down. Under these circumstances, he recommended that the Nakas should be re-established. Writing in 1849 of some of the Kandesh forests, he remarked there is a sprinkling of older Teak and Sissoo trees, but the active burnings annually carried on by the Bheel population, for the purposes of the chase and of cultivation, effectually stop the shooting up of any seedling trees, while the practice of baring the valley heads, from whence the rivers of Bauglan take their rise close to the edge of the ghats, has the visible effect (long ago pointed out by Mr. G. Inverarity, when First Assistant Collector of Kandesh) of lessening the supply of water in the streams which feed the rich garden grounds of Bauglan.—*Surgeon Gibson's Bombay Forest Reports,* 1849 *to* 1856, *p.* 68, also *Report of* 1857-58-59-60, *p.* 24.

KANDLE, the Tamil name of a Ceylon tree which grows to about fourteen inches in diameter and twenty-four feet high. It is used at times in house-work.—*Edye, on the Timber of Ceylon.*

KANDOO of Cuttack, wood known as "*Abloos*" or ebony, the tree being called the "*Kandoo.*" The darkest shade of the wood of this kind is the heart of the tree, and specimens are not easy to procure there. It is a very handsome fancy wood ; and its price per cubic foot is 12 annas or 1*s.* 6*d.*—*Cal. Cat. Ex. of* 1862.

KANGA, a hard wood of Cuttack.

KANGA VITTEE, the Malayala name of a tree which grows to about sixteen feet high, and eight inches in diameter. It is one of the jungles trees of the coast.—*Edye, Forests of Malabar and Canara.*

KANJARA, the Tamil and Malayala name of a Malabar and Canara tree which grows to about two feet and a half in diameter, and from twenty-five to thirty in height, of little use or durability. The natives value its fruit, which is very intoxicating, and is used by them as a medicine.—*Edye, Forests of Malabar and Canara.*

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NJAROM. An ash-coloured wood of Travancore, used for common building.—*Col. Frith.*

KANJUREA, the Tamil name of a Ceylon tree which grows to about sixteen inches in diameter, and ten or fifteen feet high. The natives use it at times in house-work. It produces a fruit which is used as a medicine. —*Edye, on the Timber of Ceylon.*

KANNAN THA, Burm., or Crab Tree. A tree of maximum girth, 4 cubits, and maximum length 30 feet. Abundant on an island called Pielo Island near Mergui, but scarcely procurable in Moulmein. When seasoned, the red variety sinks and the white floats. The wood is used for houses, zyats, &c., is a very durable wood of handsome grain. Of this wood, there are two kinds, red and white; the latter lighter than the former, likely to answer for helves; the former too heavy for that purpose. Both woods very good for turning purposes.—*Captain Dance.*

KANNA-TSO, Burm. A very tough, close-grained wood of Tavoy.

KA-NYENG-KYAUNG-KHYAY, Burm. In Tavoy used for boat, ship and house-building; not attacked by insects; yields an oil.

KA-NYENG-PYAN, Burm. A heavy, grey wood of Tavoy, used for handspikes.

KARA KUNDLE, the name of a tree that grows in the Malabar and Travancore forests to about sixty feet in height, and two feet in diameter. It is used by Arabs for the masts of the dow, budgerow, dhoni and pattamah. It is very strong, and is said to be durable; but must be considered heavy for the purposes to which it is applied.—*Edye, Forests of Malabar and Canara.*

KARAM. Hind.? A tree of Chota Nagpore, furnishes a hard, yellow timber.—*Cal. Cat. Ex.* 1862.

KARANCHILLY, a Travancore wood, of a dark colour, specific gravity 0·519. Used for buildings and small boats.—*Col. Frith.*

KARANGALI, the Tamil name of a Ceylon tree which is more generally known to Europeans by that of "Ebony." It may be procured at Trincomallee in great quantities, but that which is near the water-side is very small. The largest may be about nine inches in diameter, and from ten to twelve feet high: it is used for chairs and house-furniture. On the Malabar Coast this tree is named Charu maram. It grows to about ten inches in diameter, and from fifteen to twenty feet high, but the black heart of it does not exceed seven inches in diameter. In the north part of Malabar, in Canara, it is named Acha maram, and, by some of the Kanatakas, Nugagha. The natives use the young buds, leaves and flowers of this tree in cases of flux and in inflammation of the liver, for the cure of which it is said to be most useful. At Point de Galle, a great deal of the Ebony and Coromandel wood is exported to England.—*Edye, Ceylon.* (*Note.*—Edye seems, here, to describe ebonies and black-coloured woods from quite distinct trees, or to use names applicable to several trees. Possibly Hardwickia binata, and species of Diospyros are intended.)

KARANGELY in Tamil, and Karakili in Malayalam. This Malabar and Canara wood is very tough and of a whitish colour, and used by the natives for general purposes; many of the planks of the native boats are of this wood, and the edges are sewed together with coir, with wadding on the seams, and yarns crossing the joints, for the purpose of making the boats pliable in the surf, as it would be useless to fasten them with nails, &c., for the services for which they are required.—*Edye, Forests of Malabar and Canara.*

KAREOVAM, the Malayala name of a Malabar and Canara tree which grows to about eight inches in diameter, and twelve feet long. It is generally curved, and used for the frames of native vessels, and for agricultural purposes. It is known as a jungle wood.—*Edye, Forests of Malabar & Canara.*

KARI. Hind.? A tree of Chota Nagpore, furnishing a hard, yellow timber.—*Cal. Cat. Ex.* 1862.

KARINDAGARAH, the Tamil name of a Malabar and Canara tree which grows to about forty feet in height; and eighteen inches in diameter. It is used by the native carpenters in house and ship-building, and for various purposes. It is not found in any quantity, and consequently it is not much known.—*Edye, Forests of Malabar and Canara.*

KARINCOLU in Tamil, and Karinjurah in Malayalam. This Malabar and Canara tree grows to twelve or fourteen feet long, and twelve inches in diameter; it is of a whitish cast, and not of much use or durability. It produces a fruit which the natives eat in a raw state.—*Edye, Forests of Malabar and Canara.*

KARINGATTA, the Malayalam name of a soft, light wood of Malabar and Canara, which is preferred by the natives for the soles of sandals, &c. It grows to about twelve feet high and eight inches in diameter. It produces a fruit from which oil is extracted. This, with the leaves of the tree, is used in gout and rheumatic pains.—*Edye, Forests of Malabar and Canara.*

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KARITY, Tam., or Black Wood of Travancore, black colour, specific gravity 0·948; 2 to 4 feet in circumference, a strong wood: used for furniture.—*Colonel Frith.*

KARKUTA, Hind. ? A tree of Chota Nagpore, yielding a hard, red timber.—*Cal. Cat. Ex.* 1862.

KARTUMA, the Tamil name of a Ceylon tree which is considered to be the wild mango. This tree grows to about two and a half or three feet in diameter, and twenty-four feet high. It is used for canoes, native boats, &c. The fruit is very acid, and is sometimes made use of by the lower class of natives in cookery.—*Edye, Ceylon.*

KARNARA VETTE, the name of a Malabar and Canara wood which the native carpenters use for boat-work, and small vessels. It ranks amongst the numerous jungle woods, and grows only to twelve inches in diameter, and about fifteen feet high. It is not of much consideration as to quality, quantity, or durability.—*Edye, Forests of Malabar and Canara.*

KAROOTAULEY, Tam. ? A Tinnevelly wood of a black colour, used for fancy work.

KARTU NEDENARI, the Tamil name of a Ceylon tree which grows to about fourteen inches in diameter and fifteen feet high. It is used by the natives for their huts. It is not very durable, and is of little value.—*Edye, Ceylon.*

KARTU TANGI, the Tamil name, in Ceylon, of the jungle cocoanut, it grows to about twenty inches in diameter, and twenty-five feet in height. The fruit of this tree is of no use, and the trunk is of little value.—*Edye, on the Timber of Ceylon.*

KARUCUE WAEH, the Tamil name of a Ceylon tree, the wood of which is very close-grained and heavy. It is used for the frames of native vessels, and is considered a good strong wood. It grows to eighteen inches in diameter, and twelve to fourteen feet in height.—*Edye, Ceylon.*

KARUDU, the Tamil name of a Ceylon tree which the natives use in boat-work. It is not durable, and is of little value.—*Edye, Ceylon.*

KARUATAGARAH, in Tamil and Malayala. This Malabar and Canara tree has a close-grained firm wood, when old it resembles the "Vitte maram," or black wood of Malabar, known in England by the name of Bombay Blackwood or Rosewood. It grows from twenty-five to thirty-five feet long and two feet in diameter, it is used for furniture and house-building: it grows straight, and is found in patches on the ghats east of Cochin.—*Edye, Forests of Malabar and Canara.*

KASAWHA, in Malayala. This is a Malabar and Canara tree which grows to about eighteen inches in diameter and twelve feet long; it is heavy and close-grained, it produces a small berry much like pepper, which, as well as the wood, is not of much use.—*Edye, Forests of Malabar and Canara.*

KATAMANAK.

Katamanak. Tam.	Miniley. Port.

This Ceylon tree grows to about thirty feet in height, and two feet and a half in diameter. It can be obtained in great quantities. It is used by the natives for planks in vessels, and is considered valuable; but from what Edye had seen of the stock in a store at the Trincomallee yard, he was of opinion that it is only applicable to inferior purposes in the dockyard and ships.—*Edye, Ceylon.*

KATEEMOOL, Hind. ? A yellowish-coloured wood, heavy, but not strong, found in the Santhal jungles from Raneebahal to Hasdiha, about forty miles, but not very plentiful. It is used by the natives for building purposes.—*Cal. Engineers' Journal, July* 1860.

KA-THEET-NEE, Burm. In Amherst, a timber employed for house posts, boats and carts. It is a heavy, hard, grey wood, rather liable to injury from insects.—*Captain Dance.*

KA-THEE-THA, Burm. This tree is found in abundance all over the provinces of Amherst, Tavoy and Mergui. Its bark is used by the Karens in lieu of betel, and could probably be put to use in turnery.

KA-THEET-THA, Burm. A timber in Amherst, Tavoy and Mergui, of maximum giath 4 cubits, maximum length 22 feet. Not very abundant.—*Captain Dance.* (Qu ? are these two identical ?)

KATHMAHLI, Hind. ? A tree of Chota Nagpore, with a hard, red timber.—*Cal. Cat. Ex.* 1862.

KATHU-KEVI. The Tamil name of a Malabar and Canara tree which grows in Travancore. The wood is very buoyant, and is generally used for rafting the heavy timber from the forests; and also for catamarans and canoes, as it is easily worked, and obtained without much trouble, and of all dimensions. It is not very durable.—*Edye, Forests of Malabar and Canara.*

KATIE KALE, Singh. A tree of the eastern province of Ceylon, a cubic foot weighs 42 lbs., and it is said to last 25 to 50 years. It is used for common house-building and in the construction of vettra dhonies.—*Mendis.*

KATSITKA, Burm. A red wood, abundant in the forests of British Burmah, north of Ran-

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good, used for boats, said to last from 5 to 9 years. In a full-grown tree on good soil, the average length of the trunk to the first branch is 30 feet, and average girth measured at 6 feet from the ground is 6 feet.—*Dr. Brandis, Cal. Cat. Ex. of* 1862.

KATSO, Burm. In Tavoy, a wood like toon ; used in building, &c.

KATTU-KENDE, Hind. ? In Ajmeer, a hard, fine, rather close-grained, heavy wood.—*Irvine, Gen. Med. Top., page* 142.

KA-UGAN ? A tree of Akyab, which grows to a great length, and is plentiful in Ramree and Sandoway districts. The wood is used for planking.—*Cal. Cat. Ex.* 1862.

KAURIE TREE of New Zealand, the Norfolk Island Pine (*Araucaria excelsa*) attains the height of 200 feet, and yield an invaluable, light, compact wood, free from knots, from which the finest masts in the navy are now prepared.—*John's Forest Trees of Britain, Vol. I., page* 73.

KAUNA, the Tamil name of a Ceylon tree, which is used for boat crooks, knees, &c This tree grows to about fourteen inches in diameter, and six to ten feet in height. It is strong and durable, and produces a fruit which is similar to the cocoanut, and is used by the poorer natives as food.—*Edye, Ceylon.*

KAYU, Malay, also written kaya and kaia : pronounced kaya in some Malay countries and kayoo in others. The word means wood, or timber, and is invariably prefixed to the names of timber trees.

KAYU AMBALLO, Malay. A timber tree of the Archipelago, in Bawean.

KAYU API-API, Malay. Rhizophora gymnorhiza. A large tree of Singapore, has a white wood ; is excellent firewood.—*Cameron.*

KAYU ARA. A wood of Singapore, obtained from different species of Ficus with entire leaves ; they are planted near temples. —*Cameron.*

KAYU-ARANG, Malay and Javanese. Ebony ; also called Siam Wood. A black wood, which takes a high polish ; it does not grow in Singapore.—*Cameron.*

KAYU ASSAM JAUA of Singapore, the tamarind tree ; it is scarce, and cultivated for its fruit.—*Cameron.*

KAYU BABI KOOROOS. White wood of Singapore —*Cameron.*

KAYU BABUTA of Singapore. A tree the juice of which, or even the exhalations from it cause swelling in the face, eyes and body of the wood-cutter, who is careful, therefore, to peel the bark before using the axe.—*Cameron.*

KAYU BALIAN, Malay. The Iron Wood of Borneo, and the most esteemed on account of its hardness and durability. The balean is a fine timber tree of the largest size ; and, although its wood is so hard as to be almost incorruptible, the tree is of quick and vigorous growth : it is found most abundantly in the low damp forests in the neighbourhood of the sea and of large rivers. It is much used by the natives for posts of their houses, which, amongst the Dyaks, are handed down from father to son, for many generations. Many specimens which must have been in the river for ages, are as hard when cut as those fresh taken from the forests, and this timber is rarely seen in a state of decay ; the water-worm (Teredo) alone attacks it when in the water ; and though its channelling of the wood must necessarily much weaken the post, the water being admitted into it does not cause it to rot. On land or under ground it equally resists the effects of the atmosphere and the attacks of white ants, so destructive in tropical countries to most other kinds of wood. This valuable timber was formerly sought after by the Chinese, as an article of export, and in those ports which they still frequent, continues a source of considerable trade.—*Low's Sarawak.*

KAYU BAGU, a wood of Singapore ; is similar to Kayoo Baroo.—*Cameron.*

KAYU BAKKAU, is a small tree of Singapore.—*Cameron.*

KAYU BAROO, a wood of Singapore ; its bark is used for making twine, caulking, and other purposes.—*Cameron.*

KAYU BAYAS of Singapore, is a tree of the palm tribe which grows on the hills, and is put to the same purposes as the nibong, and is reckoned stronger.—*Cameron.*

KAYU BAYOR, a wood of Singapore used for boat-building ; not very much prized.

KAYU BEDARA, a tree of Singapore ; Rhamnus jujuba.—*Cameron.*

KAYU BENAR, in Singapore ; used in house-building.—*Cameron.*

KAYU BIDARRU, Malay. A yellow wood of Borneo, of a very agreeable odour, is most plentiful, and being of a very hard and durable nature, is much esteemed for posts of houses and other purposes under ground : its perfume will ultimately rescue this beautiful wood from its present degradation.—*Low's Sarawak.*

KAYU BIN, Malay. Termina liachebula.

KAYU BINNOO, a high tree of Singapore with a succulent fleshy leaf, and poi-

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sonous sap; has an edible acid fruit; the branches grow in the shape of an umbrella.—*Cameron.*

KAYU BINTANGOR, Calophyllum inophyllum, a high tree of Singapore with few branches; floats, and timber is tough; used for masts and spars of vessels; is approved before all others for these purposes. (*Note.*—Several kinds of the "poon" of India grow in Borneo to perfection, they are called by the natives 'bintangur,' and are well known for their value in ship-building.)—*Cameron, Low's Sarawak.*

KAYU BINTARO, of Singapore, Cerbera of Lin; yields a deleterious milky juice.—*Cameron.*

KAYU BOKA, MALAY. This valued ornamental wood and another, the Lingoa wood of commerce, are said to be the produce of the same tree, the Pterospermum Indicum. The tree throws out knotty excrescences or burrs, which are sawn off in slabs, 2 to 4 feet long and 2 to 8 inches thick, which are much esteemed for such fancy articles, as small boxes, writing desks, and other ornamental work. Of late years, its estimation seems to have decreased in Europe, but it is still valued by the Chinese. It is brought from Ceram, New Guinea, Arru and other islands of the Moluccas. It resembles the hue of the yew, is very hard and full of curls, the colour being reddish-brown, varying to orange. In Singapore it is sold by weight.

The Lingoa wood is also known in commerce as Amboyna wood, and very large slabs are obtainable from the lower part of the tree by taking advantage of the spurs or lateral growths. They can thus sometimes be had as large as nine feet in diameter. It is very durable, takes a considerable polish, is very abundant and may be had in any quantity.—*Great Exhibition of* 1851, *and M. E. Juries' Report.*

KAYU BONGOR AYER, a wood of Singapore; used for boat oars, floats.

KAYU BOONGA in Singapore, used in house-building.

KAYU BOONOOT. A large tree of Singapore, bearing an acid fruit, edible; the wood is of a dark chocolate colour; it is used for house-posts and in boat-building.—*Cameron.*

KAYU BRUAS. A moderately-sized tree of Singapore, which bears a sour mangosteen; the wood is used for houses.—*Cameron.*

KAYU BRAGAN, is a large Singapore tree, with a broad leaf; light wood, and not subject to dry rot; has an edible fruit; cultivated.—*Cameron.*

KAYU BUNG NGAT? COCHIN-CHINA. Emblic myrobalan.

KAYU BUTA BUTA, a wood of Singapore. The juice is boiled, and the oil collected, and used in cutaneous disorders externally.—*Cameron.*

KAYU CHICHA. Very durable wood of Singapore.—*Cameron.*

KAYU CHINDRAI, a tree of Singapore, not large; wood, light and white; the leaves are used in bowel complaints; lying-in females are kept near a fire of this.—*Cameron.*

KAYU CHINGEI, a high tree of Singapore, from 18 to 25 feet in circumference; used for ship and boat-building; stands the salt water well; is much used on the Tenasserim Coast; the wood itself floats; fracture rather short; it grows in sandy grounds.—*Cameron.*

KAYU CHIRMEI BURONG, a small tree of Singapore; its leaves are used in medicine and given to lying-in women, and externally in certain cutaneous affections; birds are very fond of its seeds.

KAYU CHUMPADA AYER. High tree, growing in marshes; the wood floats; it is yellowish; it is used in making boats; its bark is very flexible and strong, and is used in making walls for native houses, granaries.—*Cameron.*

KAYU DAMMAR ETAM. Heavy wood.

KAYU BALLONG AYAM & SREAM. Used for house-building.—*Cameron.*

KAYU DAMMAR LAUT, a very resinous, heavy and durable wood; does not float in water; very hard; perhaps the most valuable of the woods found in Singapore; will remain uninjured for twenty years under ground; beams a foot square, or even much larger, can be had.—*Cameron's Tropical Possessions, London,* 1865.

KAYU DAMMAR MENIAK. Not equal to Dammar laut. Its oil is mixed with Kruing oil for paying prahus.—*Cameron.*

KAYU DUNGUN, MALAY. A tree of Borneo, grows on the banks of rivers, and, though the timber is soft, the large buttress-like supports at the base of the tree are very hard, and are valuable for gun-carriages and other purposes; they would doubtless be useful in turnery.—*Low's Sarawak.*

KAYU DOONGOON. A large tree of Singapore, which grows on the banks of rivers near the sea-shore; colour dark-brown; the planks are used for a defence against musketry by Malayan pirates; timber crooked and tough.—*Cameron.*

KAYU DURIAN AND **KAYU DURIAN BURONG**. High trees of Singapore, afford

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valuable spars, and the latter masts for vessels ; a large mast will cost 120 dollars.—*Cameron.*

KAYU FIR, Anglo-Malay. A wood of Singapore ; it is found on the upper zones of the hills, at an elevation of about 2,200 feet ; large spars may be had.—*Cameron.*

KAYU GHAROO, of Singapore. Agila-wood.

KAYU GAHRU, Malay. Eagle wood.

KAYU GADING, a white wood of Singapore, white thin bark, used by Malayan women for tambouring frames.—*Cameron.*

KAYU GILLAM-TIKOOS, a middle-sized tree of Singapore, colour brownish-yellow ; fracture strong fibrous ; used for house-building ; its red bark is much used to tan fishing-nets ; the wood is not prized.—*Cameron.*

KAYU GIYUM, is a hard and durable wood much in request by native boat-builders, who are good judges of the best kinds of timber ; it sinks in water and resists the salt-water insects a long while.—*Cameron.*

KAYU IPEL, is a large tree of Singapore, having a reddish-coloured wood ; the natives use it in house-building ; very fibrous fracture ; planks for boat-building are cut from it ; it is reckoned equal to Merabau ; sinks in water ; the diameter is sometimes two feet.—*Cameron.*

KAYU IPOH, of Singapore. Is the long-dreaded poison tree of Java ; with the inspissated juice the Samang, or wild tribes in the interior, poison their arrows. The poison is prepared over a fire, and must be used soon after the process, or it loses much of its virulence.—*Cameron.*

KAYU JAUNG, of Singapore. A species of Acacia, resembling a chesnut ; the fruit is edible, but has a repulsive smell.—*Cameron.*

KAYU JAWI JAWI, a wood of Singapore. A species of banian.—*Cameron.*

KAYU-JELU-TONG. Malay. Is a large growing tree of Borneo, with verticillate leaves, and a bark which, being wounded, emits plentifully a white milk, which is inspissated by boiling, but has not yet been discovered to be of any use. The timber it produces, though large, is not esteemed by the natives, on account of its early decay when exposed to the rain and sun ; it is white, and being very soft, easily worked ; and it is much used by the poorer Malays for the sides of their houses, which are protected from the rain by the overhanging roofs.—*Low's Sarawak.*

KAYU JIMIRLANG SITTOOEI, a wood of Singapore, has a cross fracture ; used in house and boat-building.—*Cameron.*

KAYU JULUTONG, a wood of Singapore ; very white ; chiefly used by undertakers.—*Cameron.*

KAYU KALEDANG, in Singapore ; a large tree, wood dark-coloured, used in boat-building.

KAYU KALOOKOOB. A thorny tree of Singapore ; has an acidulous edible fruit.—*Cameron.*

KAYU KAMMIYAN, in Singapore. The tree which yields the Benjamin.—*Cameron.*

KAYU KAMOONING. Apparently the Chakas paniculata of *Lin.*; Astronia of Batavia Transact ; it is an ornamental wood of Singapore ; and the roots, which are large and flat and twisting, are formed into kris handles, and take a fine polish ; there are several kinds, such as the Kayoo Kamooning amas, K. Kamooning kunyit troos, K. Kamooning teikarbau, K. Kamooning angin, and K. Kamooning battu ; the tree prefers rocky places.—*Cameron.*

KAYU KAPUR, Malay. A close-grained and durable timber of Borneo, much valued by the natives for boat-building purposes.—*Low's Sarawak.*

KAYU KAPUR BARUS. The timber of the Kapur barus, or true camphor tree, is also highly esteemed : excepting when charged with the valuable drug, it does not emit the camphor smell, as does the timber of the Laurus camphora, of which the Chinese manufacture trunks and boxes, which, from the odour emitted by the wood, preserve whatever is put into them, from the attacks of insects of all kinds, particularly of the small ants, which are so troublesome in hot countries.—*Low's Sarawak.*

KAYU KANANGA. A large Singapore tree.—*Cameron.*

KAYU KAPINI, in Singapore. Iron-wood.—*Cameron.*

KAYU KATTONG. A large Singapore tree, used for boat-building ; that growing on high grounds is best for making tables.—*Cameron.*

KAYU KILLAT, a high tree of Singapore ; wood very tough ; very fibrous fracture ; timber not durable if exposed to weather ; used in house-building and for planks ; light-colour ; sinks in water.—*Cameron.*

KAYU KOOLIM, a very large tree of Singapore, yielding a very hard wood, which makes good planks for boats, sinks in water.—*Cameron.*

KAYU KOOLIT, a wood of Singapore.—*Cameron.*

KAYU KRANJI, in Singapore a large tree; does not float; fibrous fracture; it is a valuable wood; the Chinese use it for masts and rudders to the junks; the Malays for house-posts; less durable than Tampenes or Tummassoo Kranji. The bark is astringent, and is used by Malays instead of betel-nut, when the latter is scarce; the fruit is edible; the wood is not very buoyant.—*Cameron.*

KAYU KROOING. This Singapore tree yields a valuable oil called miniak kooing or krooing.—*Cameron.*

KAYU KRANGEI LAUT. A wood of Singapore. It is used for wheels, bows and spear shafts.—*Cameron.*

KAYU-LAUT. A tree of Singapore. Used for house-posts; lasts five or six years if exposed; colour yellowish; the tree grows in brackish water.—*Cameron.*

KAYU LIMPONG, is a tall tree of Singapore; inhabits swamps; it is used for planks.—*Cameron.*

KAYU MARALILIN. A tree of Singapore, not large, wood straw-coloured, fracture fibrous; used for rafters.—*Cameron.*

KAYU MARANTI. A wood of Singapore, of two sorts, red and white; the red is most used; planks may be had three feet broad; it is chiefly used for planking; grows on plains and river banks and hills; it floats.—*Cameron.*

KAYU MARANTI, Malay. A quick-growing timber tree of Borneo, is held in some esteem. In grain it resembles cedar, and like it is of a reddish colour, and it is much valued for making packing-cases, planks for the sides of houses, &c., when protected from the weather it is a good and useful timber.—*Low's Sarawak.*

KAYU MAROONGGEI, of Singapore. Guilandina moringa of *Linn.*, root of a pungent flavour, resembling horse-radish, for which it is substituted; the natives eat both the leaves and pods; the latter form a good table vegetable.—*Cameron.*

KAYU MATATI, in Singapore, a very brittle wood.—*Cameron.*

KAYU MEDDANG BENAR, a wood of Singapore.—*Cameron.*

KAYU MEDDANG KAMANGI, a wood of Singapore; Sassafras apparently; is a soft and fragrant wood; has a rough bark.—*Cameron.*

KAYU MEDDANG KUNING. Yellow sassafras.—*Cameron.*

KAYU MEDDANG SILA, a wood of Singapore.—*Cameron.*

KAYU MEDDANG SOORY, a wood of Singapore, used for planking and house-building.—*Cameron.*

KAYU MENCABANG, Malay, or MENCA BANG PINANG, Malay, is one of the trees which produce the vegetable tallow: it is plentiful in the Borneo forests, but would be more profitable for its fruit (which is small, and produces good oil) than for its timber, though for this also it is held in high esteem. The wood is close-grained, hard, of a reddish colour, easily worked, and very durable. This tree differs from the others which produce the vegetable oil, in growing to a much greater height.—*Low's Sarawak.*

KAYU MENGOOPOOS, a wood of Singapore, reckoned nearly equal to Tampenes; it is dark-coloured.—*Cameron.*

KAYU MERABAU, of Singapore; is a high tree affording large planks for making tables, chairs, &c., also for house-pillars and boat-building; it is durable. Kayu Merabau Etam or M. tundo, M. darah, and M. rengkong, are varieties.—*Cameron.*

KAYU MERBAN, is a fine durable timber, very useful in ship and house-building, being easily worked and very durable.—*Low's Sarawak.*

KAYU MIDDANG KUNYIT, of Singapore. Fibrous fracture; used for planks of boats.—*Cameron.*

KAYU MIDDANG SIRAI, of Singapore. High tree, wood used in boat-building.—*Cameron.*

KAYU MIRAPOO. A high tree of Singapore; grows in marshy places; wood fawn-coloured; sinks in water; does not resist the worm or beetle.—*Cameron.*

KAYU MOON TAPOOS, is a wood of Singapore with a loose bark, used for spear shafts, musket stocks, and such purposes; large spars of it may be had; it is chiefly found in Perak and Pulow Trootow or Trotto; it sinks in water.—*Cameron.*

KAYU MORATAJAM. White wood of Singapore; its root and leaves are mashed, and used as a cooling application in cases of brain-fever; the infusion of this root is drunk in cases requiring astringent medicine; it is not a strong wood.—*Cameron.*

KAYU MUDDANG-LEBER-DAUN. Fracture fibrous; used for house-building; white colour; broad leaf; large spars may be had.—*Cameron.*

KAYU MUNGRIS, is, while fresh, nearly as hard as the Kaya Balean iron wood, and more difficult to be worked, though it is very durable, but not so much so as the balean, or iron wood, but is a large timber and a very fine tree.—*Low's Sarawak.*

KAYU NAN in Tavoy, **KAIYANAN** in Moulmein. The wood called Kyanan in Moulmein and, by Dr. Mason, Kyanan, is Tavoy red wood, Syndesmus Tavoyana. In Amherst, Tavoy and Mergui Archipelago, kaya nan is of maximum girth 20 cubits, maximum length 15 feet. Very abundant on the sea coast, from Amherst to Mergui: also on banks of rivers in the province of Martaban near the sea. When seasoned it floats in water. It is one of the best woods in the country for helves; tough, light, very durable, plentiful: long in the fibre, neither liable to split nor to warp nor to break readily. Used by Burmese for planes, spears, boats, stocks of guns and all kinds of purposes. This wood is of a most beautiful colour, a combination of pink, cream colour and red, and takes a very high polish. Recommended for helves, handles of tools, hand spikes and spokes of gun carriages, and timber wheels; also for gun-stocks and planes. —*Captain Dance.* *See* KYANAN.

KAYU 'NERI,' of Borneo, is a very hard wood, growing with the mangrove in salt swamps; its timber, which has a reddish appearance, is not large but very abundant.—*Low's Sarawak.*

KAYU ? A tree of Mehra forest, Abbottabad, Hazarah.—*Cal. Cat. Ex.* 1862.

KAYU NIBONG, of Singapore, Caryota urens; grows in marshy places; the wood is valuable for house-posts and rafters, lathes, &c.; it is very hard and fibrous, as is its fracture.—*Cameron.*

KAYU NIPIS KULIT, is a moderate-sized tree of Singapore, about 1½ feet in diameter; the bark is very thin, and vertically striated; colour fawn; hard, used to make mortar pestles, and as it sinks in water is used to make anchors.—*Cameron.*

KAYU NIRIS BATTU, a high tree in Singapore; the wood is of a dark-brown colour; it is used for house-pillars; it grows in mangrove jungles.—*Cameron.*

KAYU NIRIS BUNGA. A tree of Singapore, growing in mangrove jungle; used for house-building and fencing; colour reddish; its fruit is as large as a coconut.—*Cameron.*

KAYANN, the Tamil name of a Ceylon tree which is about ten inches in diameter, and fourteen feet in height, it produces a fruit which is of no value.—*Edye on the Timber of Ceylon.*

KAYU NUNKA OR **JACK,** at Singapore, not much used here.—*Cameron.*

KAYU-NYANG, MALAY. A shrub at Bawean, the fruit of which sells at Java, at 30 florins per picul.

KAYU PANGKAP of Singapore. A species of palm; its fibre is used to tie on thatch.—*Cameron.*

KAYU PASSAT LINGA. A tree of Singapore; the outer coats of wood white, the heart red; is easily worked into planks, and is durable.—*Cameron.*

KAYU PENAGA. A large tree of Singagore; yields crooked timber for knees of vessels; an infusion of its leaves and roots is applied to the eyes to allay inflammation; on the Malabar Coast this tree is called Alexandrian laurel; and in Bengal, poorlange; it grows only on the sea shore, in sandy places; its wood is used for ribs of boats.—*Cameron.*

KAYU PINANG PURGAM. A white wood of Singapore; fracture yellowish-coloured, used for boat-building.—*Cameron.*

KAYU PISANG PISANG. A high tree of Singapore; useful for ships' masts; very tough; colour yellow.

KAYU PITTALING. A good-sized tree of Singapore; the wood is close-grained, of a light red or brown colour; used in house-building.—*Cameron.*

KAYU PULEI, a white wood of Singapore, used for planks only.—*Cameron.*

KAYU-PUTEH, MALAY. White wood, Arbor alba of Van Rumph, the Cajaput tree.

KAYAH RASACK, of Borneo; a wood which resembles the bintangur, is close-grained, strong and tough, and is used for rudders, masts, and oars for the trading boats.—*Low's Sarawak.*

KAYU RO OR **ARROW.** A graceful Singapore tree, somewhat tapering, and resembling some species of the fir; it has small cones and fibrous leaves, (Casuarina littorea); the wood is hard; not prized.—*Cameron.*

KAYU ROSSACH. A high tree of Singapore, 18 inches diameter, red for about two-thirds of the diameter; tough, and used for making paddles, oars, &c.—*Cameron.*

KAYU RUMMIYAH. A high tree of Singapore; the wood is a light dirty brown when young; of a dark-brown when old, and sinks in water; cross fracture, splintery; grows on hills; the fruit is eaten; used as posts for houses.—*Cameron.*

KAYU RUNGGAS. A lofty tree of Singapore; the juice of which is deleterious to the human frame, creating swellings over the whole body; the wood is of a reddish-brown colour; it is used for making furniture; the fracture is cross and splintery; it is often prettily enough veined, and takes a good polish; sinks in water.—*Cameron.*

KAYU RUNGAS. A red wood of Borneo, handsomely veined, which takes a fine polish, and is much used at Singapore for the purposes of furniture making ; like the ebony, it is only the old wood in the centre of the tree which is of a useful colour.—*Low's Sarawak, page* 61.

KAYU SANNAI of Singapore is a sacred tree, very scarce.—*Cameron.*

KAYU SEEAT, a scarce tree of Singapore, having a red bark, which is called by the Burmese "Chekha," and is used to eat along with betel leaf ; it is sold at Junkceylon, 8 drs. the picul.—*Cameron.*

KAYU SINGAM. This Singapore tree grows in mangrove tracts ; it is approved for boat and house-building.—*Cameron.*

KAYU SONA, MALAY. A timber tree of the Archipelago, much used at Bawean in prahu and house-building.

KAYU SUDOO SOODOO. The Euphorbium ; the Malays use it as a drug for cattle.—*Cameron.*

KAYU SRAYAN. A hard wood of Singapore, used for house-building.-*Cameron.*

KAYU SREAN. A slim Singapore tree, used for house-building.—*Cameron.*

KAYU TABANGOW BATTU, of Singapore. A hill tree.

KAYU TUMPAYAN AMAS. A fine-grained yellowish Singapore wood, used for furniture.—*Cameron.*

KAYU TAMAK BUKIT, a good wood of Singapore ; white, used for planks, boat-building.—*Cameron.*

KAYU TAMPANG BISSEE. Hard iron wood of Singapore ; used in some places instead of betel-nut along with the betel leaf ; used in house-building.—*Cameron.*

KAYU TAMPENES, is a very hard and durable wood of Singapore, excellent for house-building ; it is of a light-reddish and yellowish colour.—*Cameron.*

KAYU TAMPENES PUTIH, of Singapore, white Tampenes. Not so good as the dark Tampenes.—*Cameron.*

KAYU LENGADEI, of Singapore. For rafters and firewood.—*Cameron.*

KAYU LANGADEI. A tree of Singapore, grown in mangrove jungles : the wood is white, used for firewood.—*Cameron.*

KAYU TATATI. In Singapore used for house posts.—*Cameron.*

KAYU TINKARAS. From this Singapore tree, gharoo is said to be obtained.—*Cameron.*

KAYU TO-JOAK. In Singapore, a dark-leaved small tree, to which superstition affixes a sacred character ; most old and insolated trees are held to be kramat, and small white flags are stuck up near them, and often propitiatory offerings made to the spirits supposed to reside on the spot.—*Cameron.*

KAYU OR POKOH TOOMOOS. A high tree of Singapore, grows in mangrove jungles ; used for rafters.—*Cameron.*

KAYU TOOMOOS, of Singapore. Its bark is used by the Chinese to dye their sails and lines of a brownish red.—*Cameron.*

KAYU TUMMAK. Used for boat-building and for ships' planks.

KAYU TUMMOOSSOOH, is a very resinous wood of Singapore and, although durable, is more disposed to warp than Dammer Laut ; it is useful for rafters ; its colour is light straw ; the tree is high ; it is most frequently hollow, but beams from six to ten inches square can be had ; this wood will remain uninjured 100 years under ground.—*Cameron.*

KAYU TUMPANG, of Singapore ; a high tree ; grain yellowish ; good for house-posts ; very durable ; next to Tummoossoo for this purpose.—*Cameron.*

KAYEA STYLOSA, *Thw.*

Soovanda-gass, SINGH.

A large timber tree, growing at no great elevation in the south of the Island of Ceylon.—*Thw. En. Pl. Zeyl., I, p.* 50.

KAY YOOB, BURM. A tree of Moulmein. Its wood is used as an ordinary building material.—*Cal. Cat. Ex.* 1862.

KEE-AH-NAUN, BURM. In Tavoy, a strong crooked wood, used for stocks.

KEEHAR? URIA? A tree of Cuttack. Is a hard useful wood for mallets, pounders, rammers, and such like articles, and would, perhaps, make up strong furniture.—*Cal. Cat. Ex.* 1862.

KEONJJI, HIND.? A tree of Chota Nagpore with a soft red wood.—*Cal. Cat. Ex.* 1862.

KENDH. A close-grained, hard wood of light red colour. The heart-wood is quite black and hard, like ebony, which it somewhat resembles in every respect : it is plentiful in the Santhal jungles from Raneebahal to Hasdiha or over a space of about forty miles in length. Used by the natives for beams, &c., the fruit of the tree is also eaten by them. —*Cal. Engineers' Journal, July* 1860.

KENG-THEP-GUYUNG-YWEPT, BURM. A light inferior wood ; used in building at Tavoy.

KENG-THEP-PHEOOT-KYAY, BURM. A sound small wood ; used at Tavoy in building.

GSL

KHA-BOUNG, BURM. In Amherst, a small wood, but as strong as oak. The fruit is said to be used for rubbing on buffaloes to keep off flies.

KHAI YAH, BURM. A tree of Tenasserim; maximum girth 2½ cubits, maximum length 22 feet. Scarce all over the Province. When seasoned it floats in water. It is a tolerably good wood, but like the "Na-yoo-ya" it is very scarce.—*Captain Dance.*

KHAKODHA, URIA. A tree of Ganjam and Goomsur; extreme height 30 feet, circumference 2 feet. Height from ground to the intersection of the first branch, 9 feet. A common tree, only used for firewood.—*Captain Macdonald.*

KHALAWA. A tree of Jhullundhur, grows to the height of 15 feet; wood light yellow, soft and white, not very durable, fine-grained; polishes well; used chiefly for combs but also for agricultural implements.—*Lieut.-Col. Lake, Commissioner, Jhullundhur Division.*

KHA-MOUNG-NEE, BURM. In Tavoy, a heavy wood, not attacked by insects.

KHA-MOUNG-PY-ON, BURM. A small-sized, compact, yellowish-grey wood of Tavoy.

KHA-MOUNG THA, BURM. Very abundant in Amherst, Tavoy and Mergui; of maximum girth 2 cubits, maximum length 22 feet.

KHANDAR. In the Peepree and Garvee dangs, a term used by the Bheel and Kunbee cultivators, signifying lopping the trees of their tops and branches for cultivation Khandar is a destructive system by which acres of young trees are mowed down by the kunbi cultivators: the parts of the forest in which this system of khandar mostly obtains are the dangs Rambaj and Peepree. At a late annual meeting of the Bheel chieftains, two of the rajas, Kairal Sing and Trimbuk were fined respectively in the sums of Rupees 100 and Rupees 25.—*Dr. Gibson's Bombay Forest Report*, 1849 *to* 1856, *pp.* 41 *and* 79.

KHANGOO. A soft wood tree of Jhullundhur; used for ploughs, and produces small timber for zemindars' houses. Native combs are also made from this wood.—*Lieut.-Col. Lake, Commissioner, Jhullundhur Division.*

KHARAWAY-NU, BURM. A porous, heavy, strong wood of Tavoy, not attacked by insects.

KHEEROKOLEE, URIA.

Mimusops Kauki?

A tree in Ganjam and Goomsur. Extreme height 30 feet, circumference 3 feet, and height from the ground to the intersection of the first branch, 6 feet. A hard wood, used for ploughs and mallets. It is not common.—*Captain Macdonald.*

KHOOKOONDEAH, URIA? A tree in Ganjam and Goomsur. Extreme height 30 feet, circumference 2 feet, and height from ground to the intersection of the first branch, 9 feet. A common tree, only used for firewood.—*Captain Macdonald.*

KHOONGHO? A tree of Akyab, which grows to a large size, and is plentiful in the Sandoway district. The wood is used for making oars for boats, and sometimes in house-building.—*Cal. Cat. Ex.* 1862.

KHOOTAN, BURM. A tree of British Burmah, a loose-grained light wood, recommended for packing cases: used for black boards in Burmese schools. Br. weight 114 lbs.—*Cal. Cat. Ex.* 1862. (Qu? Koothan.)

KHOUNAY in Tamil, Kakay in Malayala and Canataka. This Malabar and Canara tree produces the pod known by the name of Cassia fistula, or Banda lotte, which is considered an excellent purgative in cases of habitual constipation, both by Natives and Europeans. It grows to 30 feet long, and from twelve to eighteen inches in diameter, it is curved in growth; is rather close-grained and heavy; and very much resembles the Margosa in Ceylon; but it is rather scarce on the coast of Malabar.—*Edye, Forests of Malabar and Canara.*

KHUMEE? A tree of Jubbulpore, yields a light, strong, and easily worked wood, much in request by natives. Major Pearson thinks that this has been confused for Kumbee, Careya arborea.—*Major Pearson, C. P., Cal. Cat. Ex. of* 1862.

KHUUR, HIND. A tree of Chota Nagpore, with a hard, yellow timber.—*Cal. Cat. Ex.* 1862. (Qu.—Is this the Kheir—the Acacia catechu?)

KIEP-DEP. In Amherst, a strong wood, resembling Kha boung, a kind of Saul.

KIEP-MAUP. In Amherst, a timber employed for cart-wheel spokes. Superior wood, free from attacks of insects; the tree is said to have an edible fruit.

KIEP-YO. In Amherst, a heavy, good wood, but small; used for house-posts and rafters.

KINDLE BELLEROM, is the Tamil name of the wood, which is called Kindle in Malabar and Canara. It resembles the wood named Angely at Cochin and in Ceylon. The Company's cruiser *Aurora*, was built by way of experiment, of this wood; it was procured from the forests in the north of Malabar, and it appeared to answer its purpose.—*Edye, Forests of Malabar and Canara.*

KINNOO. A tree of Jhullundhur, attains full size in 60 years. Length of trunk to first

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branch, 8 or 10 feet, and girth 4 feet. A variety of the ebony ; wood of young trees white, and of the old black, which is termed " Abnoos ;" sap-wood soft, heart-wood, when it becomes black, is extremely hard ; used by zemindars for ploughs, and for the wood-work of their houses. Bears an edible fruit.—*Lieutenant Colonel Lake, Commissioner, Jhullundhur Division.*

KIREEMULA, CAN. Grows in Canara and Sunda in the jungles between Bilgil and Nilcound ; said to be a choice wood for masts of boats, &c. Worthy of further inquiry.—*Dr. Gibson.*

KIRE PALLE. A very soft, coarse, open-grained, light, Ceylon wood.—*Edye, Ceylon.*

KIRI WALLA, SINGH. Lance-leaved Echites. According to Mr. Mendis, a tree of the northern province of Ceylon, a cubic foot weighs 35 lbs., and it is esteemed to last 30 years. The wood is used principally for making ornamental furniture and cabinet-work.—*Mr. Mendis.*

KIRK. A tree of Jhullundhur, grows to a good height; wood white, light, soft and weak; seldom used for any purpose. Insects attack it.—*Lieut.-Col. Lake, Commissioner, Jhullundhur Division.*

KLEINHOVIA HOSPITA, *Lin.* A very handsome flowering tree introduced into India in 1798, from the Moluccas ; according to a Prussian botanist, M. Wichura, the old wood of this tree is highly valued in Java for handles of kreeses, &c. Roxburgh says that in ten years it grew to be a large tree.—*Roxb. Fl. Ind.*, iii., 141, *Mr. Fergusson.*

KOAN, a very hard, fine, close-grained, heavy, Ceylon wood.—*Edye, Ceylon.*

KOANG, SINGH. Ceylon oak of the English in Ceylon. Grows in the southern parts of Ceylon, a cubic foot weighs 42 lbs., but its durability is only from 5 to 10 years. It is used for native oil-presses and wooden anchors, its berries are eaten by the natives. —*Mr. Mendis.* (Qu. Is this and Koan identical ?)

KODARA CHETTU, TEL. A tree of the Nalla Mallai ; it appears to be of little use.—*Mr. Latham.*

KODORO, URIA ? A tree of Ganjam and Goomsur, extreme height 30 feet, circumference 2½ feet, and height from the ground to the intersection of the first branch, 12 feet. It is said only to be used for firewood.—*Captain Macdonald.*

KOENAR, HIND. ? A tree of Chota Nagpore with a soft, white wood.—*Cal. Cat. Ex.* 1862.

KOES ? OR JACK ? According to Edye, a moderately hard, but rather coarse and open-grained, though heavy, Ceylon wood, of a beautiful saffron yellow colour, emits a peculiar, but by no means unpleasant odour.—*Eyde, Timber of Ceylon.* (Qu. Artocarpus integrifolia ?)

KOIR-PAH, the Malayala name of a Malabar and Canara tree which answers the purpose of small spars for native vessels : it is said to be strong and durable for such purposes. —*Eyde, Forests of Malabar and Canara.*

KOKOONA ZEYLANICA, *Thw.*

Swietenia febrifuga, *Moon* Cat.

Kokoon-gass of Saffragam. | Wanna pottu of Porey.

This large tree is not uncommon on the banks of streams in the Saffragam and Ambagamowa districts, at elevations of 2,000 to 4,000 feet. The inner yellow bark is employed by the natives medicinally as a sternutatory, and an oil is expressed from the seeds, which is used for burning in lamps. Wood unknown. —*Thw. En. Pl. Zeyl.*, *p.* 52.

KOLA MURDAH, TAM. A Coimbatore wood. *See* VILLAY MURDAH. (*Qu.* Vellai murdah ?)

KOLA SAHAJO, URIA ? A tree of Ganjam and Goomsur, extreme height 50 feet, circumference 4 feet and height from the ground to the intersection of the first branch, 18 feet. Abounds and is burnt for firewood and potash. The bark is used in tanning.—*Captain Macdonald.*

KOLEE KOURADEA, URIA ? A tree of Ganjam and Goomsur, extreme height 25 feet, circumference 1½ feet, height from the ground to the intersection of the first branch, 8 feet. Tolerably common and burnt for firewood, the leaves are applied to wounds. The fruit is eaten.—*Captain Macdonald.*

KONTABAOLO, URIA. A tree of Ganjam and Goomsur, extreme height 30 feet, circumference 2 feet, and height from the ground to the intersection of the first branch, 7 feet. The tree abounds and is chiefly used for firewood, though ploughshares are occasionally made of the wood. The bark is used medicinally.—*Captain Macdonald.*

KOONGHEELYARA, TAM. A Tinnevelly wood, of a light brown colour, used for building purposes ; yields dammer.

KOORMAROO. A tree of Jhullundhur, grows to about 20 feet, and of good girth. A fair timber tree ; wood rather soft.—*Lt.-Col. Lake, Commissioner, Jhullundhur Division.*

KOOSSOOM, URIA ? A tree of Cuttack, its wood is used for the handles of tools, and native cart axles ; and might be applied to other purposes.—*Cal. Cat. Ex.* 1862. (*Qu.* Melicocca trijuga ?)

KOSUMBH, Hind. ? A tree of Chota Nagpore with a hard, whitish red timber.—*Cal. Cat. Ex.* 1862. (*Qu.* Are the last two identical and what are their botanical names ? I observe frequent notices of useful woods so named.)

KOOTHAN, Burm. Qu ? khootan q. v. A loose-grained light wood, recommended for packing cases, used for black boards in Burmese schools. Breaking weight 114 lbs. A cubic foot weighs 28 lbs., in a full-grown tree on good soil the average length of the trunk to the first branch is 40 feet, and average girth measured at 6 feet from the ground is 6 feet. It sells at 4 annas per cubic foot.—*Dr. Brandis, Cal. Cat. Ex. of* 1862.

KOPASSEA, Uria. A tree of Ganjam and Goomsur, extreme height 20 feet, circumference 2 feet, height from the ground to the intersection of the first branch, 7 feet. Useless except for firewood.—*Captain Macdonald.*

KOSSAYE, Uria ? A tree of Ganjam and Goomsur, extreme height 22 feet, circumference 1 foot, height from the ground to the intersection of the first branch, 7 feet. Useless except for firewood.—*Captain Macdonald.*

KOTA MARAM, Tam. A tree of Tinnevelly, wood of a brown colour ; specific gravity 0·723, used for building in general.—*Colonel Frith*

KOUK-KO, Burm. A Tavoy wood, employed for bottoms of boats.

KOUNG MOO, Burm. A tree of maximum girth 5 cubits, maximum length 30 feet. Scarce, but found near Moulmein, near Tavoy and Mergui, on the sea coast and on the banks of rivers. When seasoned it floats in water. It is not a good wood, being perishable and liable to rot readily.—*Captain Dance.*

KRANDOOP—? A tree of Akyab which grows to a great length, and is very plentiful. Wood used for masts and native boats.—*Cal. Cat. Ex.* 1862.

KRAWNDOW ? or **KY-OUNG-THYA ?** A tree of Akyab, very plentiful. A small wood used for firewood.—*Cal. Cat. Ex.* 1862.

KULA, the Portuguese name of a Ceylon tree, called in Tamil "Kanugha." It is very heavy and close-grained, grows to about twenty-four inches in diameter and eight feet high. The natives use it for general purposes, and for houses and vessels. It produces a fruit which they eat, and from which they extract an oil which is used as a medicine.—*Edye, Ceylon.*

KULBAGI, the Albizzia odoratissima, in Canara, which grows to fifteen or twenty-five feet in height, and from twenty-four to thirty-six inches in diameter. It yields a close-grained, hard, and durable wood, and is used by the natives at Mangalore and Onnor for the keels and beams of vessels. It is of a dark colour, and is considered valuable.—*Edye, Forests of Malabar and Canara, Major Beddome.*

KUDDAR. A whitish-coloured wood, not good, found from Sooree to Hasdiha in the Santhal jungles. Planks are sawn from this wood, but it is not fit for any thing else.—*Engineers' Journal, July* 1860, *p.* 156.

KUDDOOT ALAIN, Burm. A large tree of Tavoy, used in house and ship-building.

KUDDOOT-NU, Burm. An inferior wood of Tavoy, used in boat-building.

KUEVEA, the Tamil name of a Ceylon tree which grows to about eighteen inches in diameter and fourteen feet long. It is used by the natives in boats and house-work.—*Edye on the Timber of Ceylon.*

KUHUA, Hind. A tree of Chota Nagpore, with a soft, brown wood.—*Cal. Cat. Ex.* 1862.

KUMARI, Can., of Mysore and Canara ; this is the Ponnam of Malabar, the Punakad of Salem, the Chena of Ceylon, and the Tungya of Burmah, and is a rude system of culture followed in all the countries wherein secluded tribes and others clear parts of the forest. The Kumari cultivators earn a cheap, but wretched subsistence and live in miserable huts, the Irular and Kurumbar on the Neilgherries, the Malai, also, on the Shevaroy, the Punam cultivators in Malabar, the Kumari cultivators of Canara, and the Karen in Burmah, all endeavour to obtain a precarious subsistence by scattering grain after burning the jungle, and thus avoid, to them, the irksome restraints of civilized life. A hill side, is always selected, and at the close of the year, a space is cleared. The wood is left to dry till the following March or April and then burned. The ground is then sown with Italian millet, Panicum Italicum, as also with rice, Oryza sativa. In Canara, the seed is generally sown in the ashes on the fall of the first rain, without the soil being touched by a plough. It is fenced and weeded, and the crop gathered towards the end of the year. A small crop is taken off the ground in the second year and sometimes in the third, after which the spot is deserted for 7, 10, or 12 years until the jungle grow sufficiently high to tempt the tribe to renew the process. In Ceylon, the Chena lasts two years, and includes the culture of chillies, yams, sweet-potatoes, cotton, hemp, &c. A few years ago, in Bekal, the most southern taluk of Canara, 25,746, or one-sixth of the rural population were engaged in it, but north of that taluk, it was carried on by the jungle tribes of Malai Kaders and Mahrattas to the number of 59,500.

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Kumari is now prohibited in Mysore and under great restriction in the Bombay Presidency, and the Madras Government, in 1860, prohibited it in Government forests, without special permission, which they commanded to be given sparingly, and never in timber spots. Mr. Cannan, a coffee planter of Wynaad, says that in a spot thus treated, there only re-grows wood unfit for any building purposes, and he had never been able to get coffee to grow on it. —*Dr. Cleghorn in Reports to the Madras Government*, 1858, *&c.*, *quoted in Forests and Gardens of India, p.* 126.

KUMHIR, HIND.? A tree of Chota Nagpore with a hard, green timber.—*Cal. Cat. Ex.* 1862.

KUMMI, BURM.? A Tavoy wood.

KU-POOP? A tree of Akyab. Grows to a large size, and is plentiful; wood used for making boats.—*Cal. Cat. Ex.* 1862.

KURAL OR KUCHNAR. A tree of Jhullundhur, grows to a good size, the trunk to the first branch being 10 or 12 feet, and girth 6 feet. Its wood is light-red, soft, subject to rapid decay and to worms; used by zemindars in the wood-work of their houses. The flowers are used as an article of food, and the leaves as fodder for cattle.—*Lieut.-Col. Lake, Commissioner, Jhullundhur Division.*

KURKATA, HIND.? A tree of Chota Nagpore with a hard, white timber.—*Cal. Cat. Ex.* 1862.

KUROTU-PALAH, the Malayala name of a tree in Malabar and Canara, which grows to about eighteen feet long, and eight inches in diameter. It is very close in its grain, and remarkably hard and strong. It produces a fruit which is eaten medicinally; but the wood is not much used in consequence of the labour required in working it.—*Edye, Forests of Malabar and Canara.*

KURRIMIA CEYLANICA, *Arn.*

Palang.	SINGH.	Alareya-gass.	SINGH.
Hoorakandoo.	„	Pelen.	„

A large tree of Ceylon, one variety, *a.* grows in the warm, moister parts of the island, variety *β.* in the central province, up to an elevation of 5,000 feet; timber not valued.—*Thw. En. Pl. Zeyl., I., p.* 72.

KURROOMARDOO, TAM. In Palghat the Terminalia tomentosa, a dark-coloured strong wood; used for wheelwright's work.—*Col. Frith. See* CAREE MARADOO.

KUROONGAULEE, TAM. In Palghat the Acacia sundra, a dark-coloured heavy and hard wood, used for furniture.—*Col. Frith.*

KURROO-VALAGOM, TAM. In Palghat, a small tree, of a light-brown colour, specific gravity 0·704; used for naves of wheels.—*Col. Frith.*

KURUMBOLE is the Malayala name of a wood from the forests in Canara. It grows to about twelve or eighteen inches in diameter, and from fifteen to thirty feet high: it is used by the natives for house work, and is considered a useful and durable wood.—*Edye, Forests of Malabar and Canara.*

KURVAH TANGA MARAM, TAM. Cinnamomum iners, which is the wild cinnamon wood of the jungle. It grows to about twenty or thirty feet high, and from twelve to fifteen inches in diameter: it is very scarce, and consequently not much known or used.—*Edye, Forests of Malabar & Canara.*

KUSSOO, BURM., not identical with Kyezai, *Burm.* A tree of Tenasserim, maximum girth 2 cubits, maximum length 15 feet. Abundant near the sea or the rivers' edge, all over the province. When seasoned it sinks in water. It is a very tough wood, durable, and as good as Kya-zai, for helves. The Kya-zai is a wood of the colour of oak with a yellowish tinge. The Kussoo is nearly white. This is not the soondree wood, of which latter the Burmese name is nearly the same, and the soondree wood Captain Dance has failed to procure.—*Captain Dance.*

KUTH JAMUN, HIND.? A tree of Chota Nagpore with a soft, red wood.—*Cal. Cat. Ex.* 1862.

KUTHUMMUN. In Jhullundhur, a smaller species of the "Jamoon," from which it differs in the size and shape of its leaves and fruit. A decoction of the bark is used as gargle for sore mouths.—*Lieut.-Col. Lake, Commissioner, Jhullundhur Division.*

KUVEAMA, the Tamil name of a Ceylon tree which is remarkably heavy and strong. It grows to about two and a half or three feet in diameter, and is curved in its growth. It is used in the frames of native vessels: it produces a fruit which is of no use.—*Edye, Ceylon.*

KYAI THA, BURM. A Tenasserim tree, maximum girth 1½ to 2 cubits, maximum length 7 feet. Scarce, but found widely scattered on low marshy ground in the provinces. When seasoned it sinks in water. The wood is excellent for planes, or for any other purpose, for which a straight grain, great toughness and strength are required.—*Captain Dance.*

KYAI-THA OR ITCHWOOD, BURM. A tree of maximum girth 4 cubits, maximum length 18 feet. Found abundant, but scattered up the Attaran, Gyne, and Thoungween rivers near Moulmein and near Tavoy and Mergui. When seasoned, it floats in

r. It furnishes a very compact hard timber, used for posts of houses, zyats, &c. The fibre is liable to start with repeated percussion, and the wood itself is subject to dry rot. This is called Itchwood, because the fruit, chips, or bark produce, when touched, an itching like that caused by cowage.—*Captain Dance.*

KYAI YEW, Burm. A tree of Amherst, Tavoy and Mergui, of maximum girth 3 cubits, maximum length 22 feet. Rather scarce, but found all along the banks of rivers all over the provinces. When seasoned it floats in water. Its wood is used by the Burmese to make charcoal, also sometimes for posts of small huts: but is brittle.—*Captain Dance.*

KYA MOUK, Burm. ? A kind of oak in Amherst, Tavoy and Mergui, maximum girth 4 cubits, maximum length 22½ feet. Abundant but widely scattered, all over the provinces inland. When seasoned it floats in water. It is an excellent tough wood, durable and sufficiently light; used for all purposes by the Burmese. Strongly recommended for helves, hammer handles, handspikes, staves of casks, and many other purposes, but too widely scattered to be easily obtained, unless a large quantity be ordered which should repay a search in the forests: much used by Burmese as a pole for cavady baskets.—*Captain Dance.*

KYA-NAN, Burm. On the low lands near the sea-coast of Tenasserim, there is a large tree of which canoes are occasionally made, and is much used for sandals. The wood is red; but turns black on being anointed with petroleum. The tree has pinnate leaves, with two pairs of oval leathery leaflets, and is a leguminous tree.—*Dr. Mason. See* Kayanan.

KYA-NAN, Burm. In Amherst, a very close-grained, ebenaceous wood, of a dark-red colour; used for house posts, musket-stocks, and spear-handles.—*Captain Dance.*

KYA NAN, Burm. A red wood of Moulmein, used generally by carpenters.—*Cal. Cat. Ex.* 1862. (*Qu.*—Are the last three identical?)

KYAN-PHO, Burm. A tree of Moulmein. A strong wood, good for building purposes. —*Cal. Cat. Ex.* 1862.

KYAY-TSAY-GYU-KHY-AY, Burm. In Tavoy, a heavy, compact, dark wood; suitable for gunstocks.

KYAY-TSAY-BAYOUN, Burm. A Tavoy wood, useful for common carpentry.

KYA-ZOO, Burm. In Amherst, a very heavy wood, like Saul.

KYA-ZO, Burm. A tree of Moulmein. Used for building material.—*Cal. Cat. Ex.* 1862.

KYDIA AXILLARIS, *Thw.*; A middle-sized tree near Badulla in Ceylon, growing at an elevation of about 2,000 feet.—*Thwaites.*

KYDIA CALYCINA, *Roxb. Cor.*; *W. & A.*

Kydia fraterna, *Roxb.*

Bo-ke-mai-za. Burm.
Putta Pulow of Kumaon.
Pola also Pula.
Pulli also Puli of Panjab.
Pandiki. Tel.
Potari. Tel.

This is a middle-sized tree, pretty common along the western ghats. It also grows in the valleys of the Circar mountains, in Mysore, and on the slopes of the Niligiris. It grows wild and rapidly in many parts of the Siwalik Hills up to the Indus, at heights of 3,000 feet. It grows in Kumaon. It is plentiful throughout the Pegu forests, more especially in the Pegu and Tounghoo districts. The bark is mucilaginous and employed in northern India to clarify sugar. The small saplings are from their great strength and elasticity used by the natives, for making banghy sticks, but it is large enough to afford timber of three or four feet girth. Wood white-coloured, very tough, and adapted for every purpose of house-building, for charcoal and fuel.—*Roxb., Voigt, Captain Drury's Useful Plants, Madras Hort. Gard. Cat., Drs. McClelland and J. L. Stewart, Mr. Powell, Mr. R. Thompson.*

KYEATTEE, Tam. ? In Travancore, a wood of an ash colour, specific gravity 0·972. Used for carts and buildings.—*Col. Frith.*

KYEM, Hind. ? Mahr. ? In Nagpore, a light-coloured wood, inferior to teak in strength, and greedily eaten by white-ants. Its length is from 16 to 28 feet, and girth from 4 to 3 feet. It sells at 5 annas the cubic foot, and it would answer for rafters. Major Pearson notices this wood by remarking that *Kyem* described by Captain Sankey as Nauclea parviflora, has a very fine grain, and would make very pretty furniture. It grows occasionally to a very large size. It will not bear exposure to the weather.—*Captain Sankey, Major Pearson.*

KYEN-YO, Burm. In Tavoy a kind of teak.

KYEE THA, Burm. The name, according to Dr. Mason, of *Syndesmus Tavoyana*; and also called *Kyay Mishoung*, according to Dr. McClelland *Barringtonia acutangula.* This tree is of maximum length 10 or 12 feet, it is very scarce in Moulmein, but sufficiently abundant at Tavoy. When seasoned, it sinks in water. It is the same as Kab-ban-tha.—*Captain Dance.*

KYET THAY or THEEAY KYAY, Burm. A tree found on the sea coast from Amherst to Mergui. When seasoned it floats in water. Dimensions and extent of supply not known. It is used for posts of houses, very durable but not recommended as liable to split.—*Captain Dance.*

KYE YO THOO, Burm. A tree, maximum girth 2½ cubits, and maximum length 15 feet. Very abundant at Mergui, but not procurable at Moulmein. Found inland up the rivers all over the Provinces. When seasoned it floats in water. It is an uncommonly smooth-grained, tough, close, yet not heavy wood. Durable and with but one fault,—the smallness of its girth,—which unfits it for gun carriages. It is strongly recommended for helves and handles of tools of all sorts, also for handspikes and for spokes. This wood, on careful examination, appears to be identical with Trincomallee wood, though this cannot be positively stated till the flowers of the tree can be procured.—*Captain Dance.*

KYUND, Hind. ? A tree of Chota Nagpore.—*Cal. Cat. Ex.* 1862.

KYUNI, Hind. ? A tree of Chota Nagpore with a soft, white wood.—*Cal. Cat. Ex.* 1862.

KYWAY-THOAY, Burm. In Amherst, a strong, solid wood, probably a kind of Acacia. Used for house-posts and rafters.—*Captain Dance.*

KYWON, Burm. In Amherst, a kind of teak wood.

KYWON-BO, Burm. In Tavoy, a soft wood like that of the Nauclea.

KYWON-BO, Burm. In Amherst, a timber used for house-posts, rafters and oars; it is probably a sort of teak.

KYWON-MA, Burm. In Tavoy, a soft wood like the nauclea; a variety of Kywon-Bo.

KYWON-GAUNG-NOAY, Burm. In Amherst, a close, heavy, compact, tough, yellowish-white wood, of which house-posts, rafters, &c., are made.

L

LABUAN TIMBER AND FANCY-WOODS

	Feet in height.	Feet in diameter.
Dadarru,	30	2
Gabar Bute, about	60	3
Jatichina,	60	1½
Kalim pupa tandok,	12 to 15	1¼
Kaya Aru, about	60	3
do. Arang, grows to a large size in Borneo.		
do. Arru,	30	2
do. Benatore bukit,	70	3
do. Bencoola, about	60	3
do. Badak utan. A fruit tree.		
do. Bidarru, a scented tree,	30	2
do. Impas,	40	2½
do. Gading,	25 to 30	1
do. Jamber,	30	2
do. Jampalore,	60	1½
do. KandisDahan, a fruit tree	30	2
do. Kalam pappa,	30	2
do. Karye,	20	1½
do. Kapur Rangin,	90 to 100	4 to 5
do. Kuing? Uing?	70	3
do. Kapur,	90 to 120	5
do. Kring utan,	40	2½
do. Kamuning,		0½
do. Liman, liman,		0½
do. Laoh, small tree.		
do. Leda Karbau, about	60	3
do. Malam,		3
do. Madang sisik,	50	2½
do. Madang lada,	30	2
do. Nibong binar,	90	A species of palm.
do. do. sabarane,	90	" "
do. Nasi nasi,	40	2
do. Oobah,	40	1½
Bark used to dye red silk.		
do. Plye,		
do. Paleh palawan,	30	1½
do. Petong,	30	1½
do. Rask ? Sak ? Rassak ?	40	2½
do. Rangas,	30	1½
Used for common furniture.		
do. Rampilou,	60	1½
do. Senang annun bukit,	90	4
The fruit yields an oil.		
Kaya Samuck	30	2
Used for dyeing.		
do. Sabadia,	90	
do. Samala,	50	2½
do. Saryiah,	30	3
do. Senang awan,	90 to 120	5 to 6
do. Sarogan,	25	1
do. Tampui pyah. A fruit tree.		
do. Tioro,	30 to 35	3
do. Tobah tobah utan,	30	3
do. Taratang,	20 to 30	2
do. Urat mata,	90 to 100	3 to 4

LAGERSTRŒMIA, a genus of plants of the natural family of *Lythraceæ*, species of which are found from the Peninsula of India, to the foot of the Himalaya mountains, in Burmah, and from the Malayan Archipelago into China and Japan: most of the species are highly ornamental. As they occur in China, Mr. Williams remarks that few trees in any country present a more elegant appearance; when in full flower they are by far the most beautiful plants met with on the low ground. There are two or three varieties, having red, white and purple flowers, and in the summer months when they are in bloom, they are quite the hawthorns of China, surpassing in their gorgeous flowers even that beautiful family. He generally met with them in a wild state, very near the sea shore. The whole of the species may be propagated by seed or cuttings in any garden soil. Some species found in Burmah and Tenasserim are still undetermined specifically.—*Dr. Brandis, Eng. Cyc., Fortune's Wanderings, page 20, Williams' Middle Kingdom, Riddell, Major Pearson, Mr. Thompson.*

LAGERSTRŒMIA, *Species.*

Kuen-mouence.	BURM.	Puma.	BURM.

A Tavoy wood, used in building.

LAGERSTRŒMIA, *Species.*

Pyimma. BURM.

A splendid tree, abundant throughout British Burmah, wood used more extensively than any other, except teak, and used generally for the fittings of boats, sometimes for the hulls of canoes, for house posts, planking, beams, scantling for roofs, carts, and a variety of other purposes. Large quantities are now employed for ordnance purposes. The wood of the light coloured variety is less heavy and is said to be less durable. A cubic foot weighs 37 lbs. In a full-grown tree on good soil, the average length of the trunk to the first branch is 30 feet, and average girth measured at 6 feet from the ground is 12 feet. It sells at 8 annas per cubic foot.—*Dr. Brandis, Cal. Cat. Ex. of* 1862.

LAGERSTRŒMIA, *Species.*

Pyen-ma-phoo. BURM.

A tree of Moulmein, wood used for making oars and for rough house building.—*Cal. Cat. Ex. of* 1862.

LAGERSTRŒMIA, *Species.*

Pyen-ma-zoat-gyee. BURM.

A tree of Moulmein, with a soft wood, used in the ordinary purposes of a building material.—*Cal. Cat. Ex. of* 1862.

LAGERSTRŒMIA, *Species.*

Thitpyoo. BURM.

A light, but comparatively strong wood of British Burmah, colour white and pinkish, probably a valuable wood for furniture. Used for planking: breaking weight 153 to 179 lbs. A cubic foot weighs 30 to 38 lbs. In a full-grown tree on good soil the average length of the trunk to the first branch is 80 feet, and average girth measured at 6 feet from the ground is 12 feet. It sells at 4 annas per cubic foot.—*Dr. Brandis, Cal. Cat. Ex. of* 1862.

LAGERSTRŒMIA LANCEOLATA.

Bodah or Boudaga. HIND.

An erect Dekhan tree with oblong lanceolate leaves, flowers small, white, appearing in April and May.—*Dr. Riddell.*

LAGERSTRŒMIA MACROCARPA, *Roxb.; W. Ic., p.* 109, *Ill., Wall.*

Pyen-ma?	BURM. ?	Bondarah.	MAHR.
Ben-teak,	ANGLO. CAN.	Nanah.	,,
Ven-bugum.	CAN.	Cutchay muttay maram.	TAM.
Billi nandi.	,,	Ven-taku maram.	,,
Ben-teak.	ENG.	Chinnangi.	TEL.
Ven-teak.	,,		

This tree of the forests on the western side of India is common in Wynaad and on the Western ghats. It is very common in the Bombay forests, but less so to the north of the Savitree than to the south of that river. It is a tree of large size with a long straight stem, and, Dr. Wight says, for common purposes, where timber of inferior quality is sufficient, is very useful, being easily worked. Tested by the scale, it only bore 290 lbs.; on a second trial, however, it sustained 374 lbs. Were it, he adds, stronger and more durable, the length and straightness of the stem would adapt it for spars. But, Dr. Gibson thinks that Dr. Wight underrates the quality of this wood which, he says, is very fit for many household purposes, and for the decks of ships, &c, and is much used in the Bombay dockyards, which forms a good presumptive proof that the wood cannot be very inferior. It is used at Cochin in ship-building. In the Madras Gun Carriage Manufactory, it is said to be made use of for a variety of purposes. It has great "stiffness," and wooden bridges have been built of it. In Wynaad, it is prized for making coffee cases. It is said to be a tree of Moulmein, commonly known under the name of jarrool, but this is doubtful.—*Drs. Wight, Gibson and Cleghorn, Mr. McIvor, Madras Cat. Exs. of* 1851 *and* 1862, *Col. Maitland in Madras Cat. Ex.* 1862, *Madras Exhibition Jury Report* 1855, *Major Beddome, Roxb.*

LAGERSTRŒMIA PARVIFLORA, *Roxb. Fl. Ind., W. Ic.*

Lagerstrœmia microcarpa, *Wight.*

Tsam-be-lay.	BURM.	Bondara.	MAHR.
Dhoura.	Hindi of Kumaon and Panjab.	Mana?	,,
Kut.	Hindi of Kumaon.	Bakli.	PANJABI.
Lendya,	Hindi of Central Provinces.	Adhwari.	,,
Belli nundi.	MAHR.	Dhau.	,,
Nundi muna.	,, ?	Chinangee.	TEL.
		Chinna nagi.	,,

This tree grows in the Circars, in the Godavery forests, at Courtallum, and on the Neilgherries, is common in Central India, grows in Kumaon, the Panjab, the Western Himalaya, in the Dehra Dhoon, and in the Tavoy forests. Dr. Gibson says it is most common in the Dandelee forest above the ghat; also not uncommon below, and reaches a large size. Its wood is tough, is valued there for its qualities in standing water, and is greatly in use for beams, rafters and boat timber. In the Circars, its wood stands water well, and it is used there for boats, rafters and beams: in the Nalla Mallai, it is a light-brown, compact, hard, serviceable wood, and used generally. In the Central Provinces, small preserves of it are kept by the natives to form poles for building purposes, as it grows very straight and is light. In Kumaon it is a tall erect tree, grows with a stem of 20 or 30 feet, and a girth of 6 feet. Its timber there is durable, elastic, and used as planks for rafters and for buggy shafts. It is not common in the Panjab Siwaliks. Its timber there is yellowish, elastic and tough, and is valued for agricultural implements, and in the N. W. Provinces as buggy shafts; this tree does not grow west of the Sutlej. As a wood of British Burmah, it is not much used. A cubic foot weighs 40 lbs. In a full-grown tree on good soil the average length of the trunk to the first branch is 15 feet, and average girth measured at 6 feet from the ground is 5 feet. It sells there at eight annas per cubic foot.—*Voigt, Drs. Gibson, Wight, Brandis, J. L. Stewart and Mason, Captain Beddome, Major Pearson, Messrs. Latham, Thompson and Powell.*

LAGERSTRŒMIA PYMMAH, *McClelland.*

Pymmah-nee. BURM.	Red Pymmah. ANGLO-BURM.
Pymmah. ,,	

Dr. McClelland tells us that this is a common and valuable timber tree found generally all over the Pegu country. It ceases, however, a little below Toungboo and Prome, so that at those places it cannot be made available for building purposes; but, at all the lower stations from Prome and Toungboo downwards, it ought to supersede the use of teak.. It is a red-coloured wood, strong and adapted for house-building. At page 10 of his report, he says, *Lagerstrœmia pymmah*, next to teak, is in greater request than any other description of timber, as it is not injured by white ants. The Burmese gun carriages are made of this wood: its fault is its liability to shakes. It is not, as supposed, *Lagerstrœmia reginæ*, but a different species. But, at page 42 of the same report he remarks that the Lagerstrœmia reginæ or pymmah, is found in the Ma-ya-gie forests of Pegu and on the Choungs Kayoo, Thabyeed and Thonat in abundance; it stands without a rival in strength; "for," says Dr. Mason, the posts of an old wharf at Tavoy, which were of this wood (Pymmah) stood erect for twenty or thirty years; he seems, however, to consider that house posts often decay in the ground in a much shorter period. It is considered a valuable timber in ship-building. This seems the tree described by Captain Dance as Pymmah Nee or Red Pymmah; as very abundant all over the Tenasserim and Martaban provinces, and found of maximum girth 6 cubits and maximum length 30 feet. When seasoned it floats in water, and is a tough wood, very good for helves, and already used for such, and for other ordnance purposes. He says that the great fault of pymmah is its liability to shrink and warp when exposed to the heat and sun, but it has not been killed and left standing as teak has been, otherwise the tendency to warp might disappear.—*Dr. McClelland, Captain Dance, Selec. Records, Govt. of India, Foreign Dept., No. IX., pp.* 10 *and* 42. (*Note.*—Does Dr. McClelland regard the white wood tree as L. reginæ, and the red wood as L. pymmah, which Dr. Brandis treats as two varieties of L. reginæ? Is this the species noticed at the top and bottom of last page, or are the white and red woods only from trees of different ages?)

LAGERSTRŒMIA PUBESCENS, *Wall.*

La-i-zah. BURM.

A very large tree of British Burmah, stem not always perfectly round, and is inclined to form buttresses; timber valued for bows and spear handles, also used for canoes and cart wheels. A cubic foot weighs 53 lbs. In a full-grown tree on good soil the average length of the trunk to the first branch is 100 feet, and average girth measured at 6 feet from the ground is 12 feet. It sells at 8 annas per cubic foot.—*Dr. Brandis, Cal. Cat. Ex.* 1862.

LAGERSTRŒMIA REGINÆ, *Roxb.*

Flos reginæ, *Retz.*
Adambea glabra, *Lam.*; *Rheede.*

Jarul. BENG.	Nannu. MAHR.
Jarool. ,,	Jarul. MALAYA.
Arjuno. ,,	Adamboe. MALEAL.
Pym-mah. BURM.	Jarul. ,,
Peemah ,,	Stotulari. SANS.
Halee dasul. CAN.	Muruta-gass. SINGH.
Queen Lagerstrœmia. ENG.	Murutu-gaha. ,,
Jarul. HIND.	Cadali pua. TAM.
Mota bondara. MAHR.	Kadali pua. ,,
Tannana. MAHR.	

This large tree grows in Ceylon, in the Peninsula of India, at Coimbatore. It is very abundant at the foot of the Neilgherries, in Malabar, in Canara and Sunda, in the mountains north-east of Bengal, in the Jynteah hills, in Pegu and Tenasserim, Amherst, Tavoy and the Mergui Archipelago. Dr. Mason tells us that the queen Lagerstrœmia in its native soil is a large timber tree, and when in flower is one of the most conspicuous in the Tenasserim provinces. In full blossom, in the morning, a tree looks as if mantled with roses, but the flowers change through the day to a beautiful purple, making it appear at evening, if seen from a short distance, like a bower of English lilacs. It is not uncommon in the warm, moister parts of the western and southern parts of Ceylon, up to an elevation of 1,500 feet, and Mr. Ferguson says is there used for casks and various useful purposes; but is more remarkable there for its rose-coloured and large handsome purple flowers than for its timber. Major Beddome says that in Malabar the tree gives a valuable wood, tough and very durable and used in ship-building. In Canara and Sunda, it grows near the banks of rivers below, and reaches a large size. It is common in the jungles below the ghats, south of the Savitree river; but is hardly found north of that and never in the inland Bombay jungles. In Ceylon it is used for water casks and buildings. Dr. Wight, writing in Coimbatore, says this tree is more celebrated there, for its large handsome flowers than for its timber, which last, however, is used for common purposes, and Dr. Riddell, in the Hyderabad Dekhan, repeats that opinion : also, Dr. Gibson mentions that the timber of the Bombay forests, is reckoned rather good, and being generally crooked, is used, for the knees, &c., of native boats. At another place he says the wood is of the same quality as L. parviflora ; and is used in houses and boats. Dr. Hooker tells us that about 70 miles up the river Soormah, the mountains on the north, which are east of Jyntea, rise 4,000 feet high, in forested ranges like those of Sikkim. Swamps extend from the river to their base, and penetrate their valleys, which are extremely malarious ; these forests are frequented by timber-cutters, who fell the jarool "Lagerstrœmia reginæ," a magnificent tree with red wood, which, though soft, is durable under water, and therefore in universal use for boat-building. Dr. Brandis tells us that it is a splendid tree throughout British Burmah. Its wood is used there more extensively than any other except teak, being used generally for the fittings of boats, sometimes for the hulls of canoes, for house-posts, planking, beams, scantling for roofs, carts, and a variety of other purposes. Large quantities are now employed for ordnance purposes. There are, he says, two varieties of the wood, a red and a white, but the light-coloured variety is less heavy and is said to be less durable. A cubic foot weighs lbs. 42 to lbs. 44. In a full-grown tree on good soil the average length of the trunk to the first branch is 30 feet, and average girth measured at 6 feet from the ground is 12 feet. It sells, in Pegu, at 8 annas per cubic foot. In Ceylon the wood is esteemed to last 30 to 40 years and, Dr. Mason tells us, that the posts of an old wharf at Tavoy which were of this wood, stood erect for twenty or thirty years ; but house-posts often decay in the ground in a much shorter period. In Tenasserim, it is considered a valuable timber in ship-building. He adds that there is a smaller species of lagerstrœmia in the Pegu jungles, the wood of which is inferior, but it is sometimes confounded with the other. In the Madras Gun Carriage Manufactory it is used for light field cheeks, felloes, cart naves, framing and boards of waggons, limbers, platform carts, ammunition box boards and heavy field cheeks.—*Voigt, Thwaites, Drs. McClelland, Riddell, Wight, Brandis, Mason and Gibson, Mr. Mendis, Captain Dance, Major Benson, Colonel Maitland in Madras Cat. Ex. of* 1862, *Dr. Hooker's Him. Jour., Vol. II, p.* 327, *Major Beddome.* (*Note.*—It will be observed that Drs. McClelland and Brandis and Captain Dance all recognise a red and a white wood from a tree of this genus.)

LAGUNARIA PATERSONII. White oak, or white wood, tree of Norfolk Island. It grows very erect, attains a height of 16 or 20 feet, and has delicate pink blossoms. Its wood is white and spongy, and is used for knees for boat-building.—*Bennett.*

LAMMAY, BURM. In Amherst, a timber used for house posts ; it is a red, light, but useful timber, like sandalwood, and is free from attacks of insects.—*Captain Dance.*

LA-PHYAN, BURM. In Amherst, a heavy, solid, large-sized timber, but rather liable to injury from a peculiar insect, not the white ant.—*Captain Dance.*

LANCE-WOOD ; Tenasserim lance-wood. A tree which produces a timber possessing the properties of lance-wood, is not uncommon in the Tenasserim provinces, but it belongs to the dog-bane tribe, and is not at all related to *Guatteria virgata*, the lance-wood of commerce.—*Dr. Mason.*

LARIX DEODARA ?

Cedrus deodara.

Deodar. ANGLO-HIND. | Kelon. HIND.

Its turpentine is the Kelon ka tel, *Hind. See* Cedar. Cedrus. Deodar.

LASIOSIPHON ERIOCEPHALUS, *D. C., W. Ic.*, 1859.

Gnidia eriocephala. *Wight, Gardner.*

A small tree, grows on the Neilgherry and Pulney Hills ; quality of wood unknown.—*Major Beddome.*

LATOOR. A reddish-coloured light and weak wood, plentiful in the Santhal jungles from Raneebahal to Hasdiha. Light articles of furniture are manufactured from it by the natives, but it is too weak to be used by them for building purposes.—*Cal. Engineers' Journal, July* 1860.

LAURUS. A genus of plants, some of which furnish useful products, though their woods are not all in use. Of these are the cinnamon tree of Ceylon "Laurus cinnamomum ;" the L. culitlawan of Amboyna ; the L. malabathrum of several parts of India, and L. nitida of Pegu and Tenasserim.

LAURUS, *Species.*

Paintha. BURM.

A Tavoy tree, wood used in house carpentry.

LAURUS, *Species.*

Kye-zai. BURM.

A tree of Amherst, Tavoy and Mergui, of

CSL

maximum girth 2 cubits, and maximum length 15 feet. It is not obtainable at Moulmein, but is found along the coasts from Amherst to Mergui; also on the banks of the Tavoy river. When seasoned, it floats in water. It yields a very tough wood which has often been used for helves with great success, and has been proved to possess extraordinary strength and tenacity. Very durable and not too heavy for helves, for which it is recommended as, also, for handles of tools of all kinds. Dr. Mason says that in Tavoy it is a hard wood, used in carpentry.—*Dr. Mason, Captain Dance.*

LAURUS, *Species.*

Kullowa. BURM. | Kurrowa. BURM.

A Tavoy wood.

LAURUS, *Species.*

Thit-ya. BURM.

In Tavoy a very large tree, timber used in building, &c.

LAURUS, *Species.*

Thug-goo. BURM.

A wood of Tavoy, used for oars, &c.

LAURUS, *Species.*

Keemna. BURM.

In Tavoy, a small tree, wood used for posts.

LAURUS CAMPHORA, *Linn.*

Camphora officinarum. *Nees* | Kaya Kapur. JAP.

A native of Japan, Formosa, and of China, principally near Chin-Chew in the province of Fo-kien. It yields one of the camphors of commerce, to obtain which, the wood, split into billets, is boiled in water in an iron pot, covered with earthenware heads filled with straw, on which the camphor concretes. The wood of this tree is made into boxes, which are valuable as a preservative against insects. —*Royle, Eng. Cyc., Fortune's Residence, Riddell.*

LAURUS GLANDULIFERA ? ? *Wall.*

Martaban Camphor wood. | Burmese Sassafras wood.
Tree galanga.

This is a very large tree, according to Dr. Wallich, very like *Laurus glandulifera*, which furnishes the Sassafras, and Camphor wood of Nepaul. It grows scattered sparsely throughout the Tenasserim provinces in Amherst, Tavoy and Mergui. It is not very abundant but procurable, from Amherst to Mergui, all along the sea-coast at Yea, Henzay and other places. Its maximum girth 3 cubits, rarely 4, and maximum length 20 to 30 feet. When seasoned it floats in water. It has the odour of Sassafras, is often used in house carpentry, also for interior of junks, and for inside works of drawers, boxes, &c., as its odour repels insects. It is a durable wood, when seasoned and worked up, remarkably tough and strong, excellent for planes, helves, and handles of tools generally, and would be valuable for almirahs in which to keep serge, hospital clothing, &c.—*Captain Dance, Dr. Mason.*

LAURUS VILLOSA— ?

Koul. HIND.

This tree is found in all the moist ravines of Kumaon, attaining a height of 20 feet with a trunk of 3 feet in circumference. Timber white, close-grained and somewhat durable, could be used in cabinet work and in turnery.—*Mr. Thompson.*

LAWSONIA ALBA, *Lam.; W. & A.*

L. inermis, *Roxb.*

Country mignonnette. English of Ceylon. | Camphire of the Song of Solomon.
Mehndi. HIND. | Marithondi. SINGH.
Henna. PERS.

A good hedge and fence plant. Its leaves, dried, are used in dyeing hair, skin and nails red.—*Messrs. Fergusson and Powell.*

LEGUMINOSÆ. In this family, in Burmah, Captain Benson mentions the following, as valuable timber trees: Acacia, two species not named, used by the Burmese for naves and spokes of wheels. Acacia stipulata, a valuable wood for general purposes, its middling girth and scarcity would, however, render it useless except in small quantities and scantling. Dalbergia, species, resembling Bombay blackwood; Inga xylocarpa and Pterocarpus Indica are of this order. Also Cassia fistula, a beautiful ornamental tree, with wood useful for furniture, naves and spokes of wheels and tool handles; Inga xylocarpa is a dense wood, resembling Cassia fistula, used for windlasses, block sheaves and for parts of gun carriages; was found too brittle to resist concussion—Pterocarpus Indica is therefore preferred and generally adopted. The family is rich in trees, but not much so in temperate climates.—*Major Benson.*

LEP-DWAT, BURM. In Amherst, a timber used for spear-handles and sword-sheaths: it is a fine grained, white wood, fit for turning purposes and picture-frames; it is probably the Nauclea used for similar purposes in Bengal.—*Captain Dance.*

LIEUN, BURM. In Amherst, a timber used for house posts and rafters. It is a most valuable compact wood, homogeneous and very heavy, of deep-brown colour and fine grain, and exempt from attacks of insects.—*Captain Dance.*

LIEP-YO, BURM. In Amherst, used for making carpenter's tools; it is a very compact and heavy but small sized timber.—*Captain Dance.*

LIGUSTRUM, of this genus, L. lucidum is a small tree of China. Ligustrum Neilg[illegible]ense, *W. Ic.*, is mentioned by Major Beddome as a small tree growing on the banks of streams in the Neilgherry and Anamullay hills, but wood is not known.—*Major Beddome.*

LIGUSTRUM ROBUSTUM, *Blume*, 188. According to Mr. Thwaites, this tree grows in the Central Province of Ceylon up to an elevation of 5,000 feet, and is common in the Happootella District. Major Beddome mentions it as common in the lower forests on the western coast of India, and gives as its synonyms *Olea robusta*, Wight ; *Visania robusta*, DC., and *Phillyrea robusta*, Roxb., Fl. Ind., and he describes its wood as very hard and durable and deserving attention. In Silhet it grows to be a very large tree, and, there, furnishes very hard durable wood. Bits of its bark are put into the toddy of the Caryota urens to make it ferment.—*Roxburgh, Thwaites, Fergusson, Beddome.*

LIMONIA, a genus of plants belonging to the natural order *Aurantiaceæ*, so called from the hindi names of the lemon, neemoo and leemoo. Most of the family abound in essential oil, the leaves of some of the Limonias are fragrant, and the fruit, though small, of *L. acidissima* and *L. crenulata* is very acid. Wight gives Limonia missionis : L. caudata, *Wall.*, grows in the Khassia hills. L. laureola is remarkable as the only plant of this family found on the tops of cold mountains. The people of the Himalaya, remarking its highly fragrant leaves, fancy that it is by feeding on them that the musk-deer acquires its strong and peculiar flavour. L. angulata, *W. & A.*, is a tree of the Moluccas. L. caudata, *Wall.*, of the Khassya Hills. L. laureola of Nepal. —*Voigt, Eng. Cyc., W. Ic.*

LIMONIA ACIDISSIMA, *L. D. C.*

Limonia crenulata. *Roxb.*, *C. Pl.*	Turelaga. TEL.

Grows on the Anamullays, at the falls of Gokak ; is common on sandstone hills at Pad'shapore, in the forests of the Godavery, at Hurdwar, Monghyr and Assam. Wood very hard, and worthy of attention.—*Roxb.* ii, 381, *Voigt*, 139.

LIMONIA ALATA, *Wight, Ill.* 41.

Kat yelloo mitcha maram. TAM.

Tree small, but the wood is remarkably close-grained, hard and heavy. It is pale-yellow or straw-coloured, and if procurable of adequate size, would be very valuable. Is found in the forests on the western side of the peninsula of India, in the southern ghat forests of the Bombay presidency, above and below, where the wood has all the qualities attributed to it by Dr. Wight ; but it is not a common tree.—*Drs. Wight and Gibson.*

LIMONIA MISSIONIS, *Wall.* 45.

Pamburu-Gas. SINGH.

Grows in Tanjore, in Ceylon from Colombo to Jaffna ; wood light-coloured, but when variegated, much used for furniture.—*Voigt*, 143, *Mr. Fergusson.*

LIMONIA PENTAGYNA ?

Chitraka. TEL.

According to Mr. Rohde, a large timber tree, a native of the Circars, Bengal, &c.—*Mr. Rohde, MSS.*

LINGOA OR AMBOYNA WOOD. This wood is very durable, and takes a high polish. It was imported from the Moluccas in considerable quantities at the time when the latter were British possessions ; it is very abundant, and may be had in any quantity. Very large circular slabs are obtained from the lower part of the tree by taking advantage of the spurs, or lateral growths ; they are sometimes as large as nine feet in diameter. A circular disk of wood thus obtained, nearly seven feet in diameter, as well as some other specimens, were exhibited in 1851 by Messrs. Almeida of Singapore, and were deemed deserving of a Prize Medal by the Jury. The tree producing this fancy wood is still undetermined, but is supposed by some to be from a species of Pterospermum. *See* Kayaboka wood, Java woods, Pterospermum Indicum.

LIQUIDAMBAR ALTINGIA, *Blume.*

Nan-tar-uk. BURM.	Rasamala. JAV.
Liquid amber tree. ENG.	Rasamala. MALAY.
Liquid storax tree. ,,	

A native of the forests of Java, at elevations of 2,000 and 3,000 feet above the level of the sea, and indigenous on the Tenasserim coast. In some parts, it is quite abundant and a considerable stream in Mergui derives its name from this tree.—*Eng. Cyc., Dr. Mason.*

LIQUIDAMBAR CERASIFOLIA, *Wallich.*

Sedgwickia cerasifolia, *Griff.*

Grows in Assam, but not known to yield balsam.

LITSÆA, of this genus L. umbrosa is a tree of the Khassya mountains ; L. furfuracea, a tree of Pinang and Singapore ; L. consimilis of Kumaon.

LITSÆA FUSCATA, *Thw.* A tree growing 20 feet in height in the central province of Ceylon, at an elevation of 6,000 to 8,000 feet.—*Thw. En. Pl. Zeyl.*, p. 258.

LITSÆA ZEYLANICA, *N. ab. E.*

L. trinervis, *Moon*, additions, pt. 1.

Dawul-kurundu. SINGH.

A small tree of Ceylon, very abundant up to [illegible]0 feet. It grows also on the Neilgherry and Anamullay hills, in Malabar and the forests of the western coast. Used for common house-building.—*Voigt*, 311, *Messrs. Fergusson and Mendis, Major Beddome.*

LODH, Hind. A tree of Chota Nagpore, with a soft, white wood —*Cal. Cat. Ex.* 1862.

LOOKKEE, Tel. In the Nalla Mallai, a fine-grained wood, of a greyish colour ; found in small quantity.—*Mr. Latham.*

LŒNDIA, Mahr. ? A Nagpore wood, said very closely to resemble "Thevus," another Nagpore wood, and to be equally good. It is probably, therefore, a valuable timber. *Captain Sankey.*

LONICERA QUINQUELOCULARIS.

Pathli of Chamba Hills.
Phut of Kághán, Murree.
Jarlangai Pashtù.

A large shrub, very abundant throughout the Himalayas—*Powell, Hand Book.*

LUMNITZERA LITTOREA.

Pyrrhanthus littoreus. Jack.

A tree of Pulo-Dinding and Penang.

LUMNITZERA RACEMOSA, *Wilde.*

Petaloma alternifolium, *Roxb. Fl. Ind.* ii, 373.
Bruguiera Madagascariensis, *DC.*

Kripa. Beng.
Kara kundal. Maleal.
Beriya. Singh.

A tree of Madagascar, grows on the banks of salt water creeks in the Konkan, also in the Sunderbunds, in Ceylon and in several parts of the coasts of the two peninsulas of India. Its wood is small but solid, heavy, strong and durable, and used for posts and other purposes in house-building in Calcutta, but chiefly for fuel.— *Voigt, Useful Plants, Fergusson.*

LUNU MIDELLE, Singh.

Common Bread tree. Eng.

A tree of the western parts of Ceylon. A cubic foot of its wood weighs 15 feet, and it is said to last 8 to 20 years. The small sticks and branches are used in common buildings, and as out-riggers for dhonies and fishing boats ; the timber for panels of carriages, buoys, targets, &c.—*Mr. Mendis*, (*Note.*—Is this an Artocarpus ?)

LUZAR, Burm. A log of a certain length

LYCIUM EUROPÆUM, or L. EDGEWORTHII.

Kangi of Panjab.

A tree found in the jungles of the central plain districts of the Panjab.—*Powell.*

M

MABA BUXIFOLIA, *Pers.*

Ferreola buxifolia, *Roxb. ;* iii, 790.

Iron wood. Eng.
Kaluha-baraliya. Singh.
Irumboli Tam.
Pishanna. Tel.
Pisinika. Tel.
Utti chettu. ,,
Nalla muddee. ,,

A small tree of Ceylon, the Circar mountains and the forests of the Godavery, furnishing a dark sepia-coloured wood, small but remarkably hard and very durable. Thwaites enumerates three varieties of this plant in Ceylon. Its berries are pleasant to eat.—*Voigt, Capt. Beddome, Fl. Andh., Fergusson.*

MACARANGA INDICA, *R. W.*

Vutta thamare. Tam.
Putta thamara. Mal.

This tree grows in the Neilgherries and is common in Travancore. It produces a light crimson-coloured gum, which is used in medicine, and for taking casts.—*Drury's Useful Plants.*

MACARANGA ROXBURGHII, *Wall. ; W. Ic.*

Osyris peltata, *Roxb. ; W. Ic.*

Chanda. Can.
Boddi chettu. Tel.

This is marked by Voigt, as a shrub of the Circars. The Telugu name indicates that it is a tree. All the young parts of this plant are covered more or less with soft resinous adhesive matter, smelling strongly of turpentine.—*Roxb.* iii, 755, *Voigt.*

MACARANGA TOMENTOSA, *W. Ic.*

Kanda-gass. Singh.
Pat-kanda. Singh.

This small tree is very abundant in Ceylon, up to an elevation of 3,000 feet. It grows, also, in Travancore, and exudes a gum of character similar to that of M. Indica. Wood not very strong.—*Thw. En. Pl. Zeyl., p.* 274, *Drury's Useful Plants, Fergusson.*

MACHILUS MACRANTHA, *N. ab. E.*

Machilus glaucescens, *Wight.*

Ululu-gas. Singh.
Oruk of Sylhet.

A large tree, grows in the Central and South-western Provinces of Ceylon, at 1,500 to 4,000 feet. Its timber is used for house-building and economical purposes.—*Thwaites, quoted by Mr. Fergusson.*

MACREIGHTIA BUXIFOLIA, *Pers. A. D. C. Prod. ; Wight Ic.*

Kaloo-habaraleya-gass. Singh.

Of this there are four varieties *α*, *β*, microphylla ; *δ*. angustifolia ; var. *α*. and *β*. grow in the hot drier parts of Ceylon, var. *δ*. in the Ambagamowa district, and near Ratnapoora. Var. *δ*. on the banks of rivers ; woods not known.—*Thw. En. Pl. Zeyl.*, p. 183.

MACREIGHTIA OBLONGIFOLIA, *Thw.* A small tree of Ceylon, near Ratnapoora, and in the Singherajah and other found between that place and Galle.—*Thw. En. Pl. Zeyl.*, *p.* 193.

MADDANG KAMENHJIR. A Penang wood, used by the Chinese for making boxes.

MADDANG TANDACK. A Penang wood, of a dark brown-colour. Not used.

MADETIYE, SINGH. Adenanthera pavonina? Under these names, Mr. Mendis describes a tree of the western side of Ceylon, a cubic foot of which weighs lbs. 56, and is said to last 30 years. It is used in common house-buildings. The tree produces a red seed which is roasted and eaten.—*Mr. Mendis.*

MADRAS PRESIDENCY, ITS TIMBER TREES AND FANCY WOODS. Amongst the earliest contributors to this department of the economic resources of the country, was Dr. Roxburgh, whose invaluable Coromandel plants were published, in 1795, 1798 and 1819, by the East India Company, in three folio volumes, and after his death, Dr. Wallich commenced to edit his Flora Indica, which ultimately appeared in 1832 from the editor, the Reverend Dr. Carey, in three volumes, 8vo. In 1813, appeared Dr., afterwards Sir Whitelaw, Ainslie's Materia Medica of Hindostan and Artisan's and Agriculturist's Nomenclature in which are many notices of the useful timbers and fancy woods of South-eastern Asia, and which re-appeared in 1826, in his Materia Indica. Early in the beginning of the nineteenth century, Mr. Edye, of the Survey department of the Navy, reported on the timber trees of Canara, Cochin and Travancore, on the Malabar Coast, and on those of the Island of Ceylon. His report appeared in the Royal Asiatic Society's Journal in 1835. About that year, Lieut. Colonel Frith of the Madras Artillery made an extensive tour through the timber provinces of this presidency, during which he collected 187 of the woods of the country,—from Penang 45; from Palghat 20; Tinnevelly 41, and Travancore 81,—one set of which were retained in the Grand Arsenal at Madras, and another forwarded to the India House, to the United Service Museum. Each of his woods was accompanied by a note as to its quality and its specific gravity, and for conciseness and usefulness, these notes remain unrivalled. Subsequently, in 1850, when the Madras Central Committee were gathering together samples of the raw products of the country for the coming Exhibition of 1851, Dr. Wight, the author of the Icones and of the Illustrations of Indian Botany, furnished, from Coimbatore, extensive notes on 133 woods which he had identified in the Coimbatore and Palghat forests. He named these botanically, and added the vernacular synonyms which Ainslie and Edye had given. That list was sent to Mr. Rohde of the Madras Civil Service, who contributed valuable practical remarks, on 35 of the 133 woods that Dr. Wight had described. Mr. J. E. Chapman in 1851, exhibited 20 of the timbers of Malabar, which he considered applicable for railway purposes and which had been collected by Dr. Gibson. Since then, our knowledge of the timbers and fancy woods of peninsular India, has been much extended. Dr. Cleghorn, as Reporter to the Jury on woods, in the Madras Exhibition of 1855, reported on 146 woods. At the same time, Captain (now Major) Macdonald sent a list of 150 woods from the forests of Ganjam and Goomsur, and Captain Beddome enumerated 108 of the trees of the Circars and of the forests of the Godavery. Dr. Gibson, the Conservator of the Bombay Forests, gave continuous lists of 64 of the timber trees of Canara and Sunda, and, subsequently, of 157 of all the Bombay forests. Captain Sankey has added to our knowledge of the woods in the northern part of the peninsula, by furnishing notices of 22 of the woods of Nagpore on which Major Pearson, Lieutenant Doveton and Mr. Jacob, of the Central Provinces, have since furnished me with remarks, and Major Pearson has written for me a very valuable report on the forests of the Central Provinces and their woods. Lieutenant-Colonel Macdonald, and the late Captain Philipps of the Madras Army, sent to the Madras Exhibition of 1855, valuable lists of woods growing in Ganjam, Goomsur and Parla Kimedy, and Captain (now Major) Beddome has since increased our knowledge of the timber trees of that locality, in a report in 1864 to the Madras Government. While this has been done for the peninsula of India, Captain (now Major-General) Simpson, and Captain (now Lieut.-Colonel) Dance of the Madras Artillery, and Lieut.-Colonel Benson of the Madras Infantry, in reports to the Ordnance and Commissariat Departments, on the timber trees of Burmah, Moulmein, Amherst, Tavoy and Mergui, and Dr. Mason's exhaustive works on the Natural Products of Tenasserim and Burmah, have appeared, as also Drs. Wallich, Falconer, McClelland and Brandis' descriptions of the forests and timber trees of Pegu, which have done much to make known the many useful timbers of the Burmese provinces and of the Malay peninsula, where the Madras Troops serve. Captain Dance's notes embraced 114 woods; Dr. Mason's 63; Dr. McClelland's 76; Major Benson's 31, and Dr. Brandis' 116; and there were, likewise, exhibited at the Exhibition of 1851, 90 woods from Amherst; 49 from Labuan; 32 from Singapore; 19 from [illegible], along with 86 woods collected by Dr. Wallich, viz., 17 in Martaban and 69 from Tavoy; as, also, 10 from Moulmein by Mr. J. E. Colvin, and the 187 woods that Colonel Frith had collected in his tours. As Honorary Secretary to the Madras Exhibitions of 1855 and 1857, for the Madras Committee for the London Exhibitions of 1851 and Paris Exposition of 1855, and in forming the Government Central Museum, Madras, I gave special attention to the timbers of the country and collected together specimens of every procurable wood. The collection in the Madras Museum is perhaps unrivalled. While forming it, Sir George Anderson, then Governor of Ceylon, sent a beautiful series of 96 of the woods of that island, collected by Mr. Adrian Mendis, Master Carpenter of the Royal Engineers' Department there. But, as all Mr. Edye's list of Ceylon woods were in the vernacular, so, of Mr. Mendis' names several are in the Singhalese language, and some of his botanical terms are evidently erroneous. With Mr. Thwaites' enumeration of the plants of Ceylon, it will be possible to identify botanically many of Messrs. Edye's and Mendis' woods, the importance of whose notes, however, even as they now are, cannot be overrated—from the practical knowledge which those two writers possessed. Still more recently, notices of many valuable timber trees were given in Major Drury's "Useful Plants" published in 1858. In the first edition of this work, published in the beginning of 1858, were gathered together the results of the labours during the previous seventy years, of the several contributors to this branch of economic knowledge. Mr. Latham, of the Madras Railway, subsequently noticed 87 woods in the Nalla Mallai mountains, which border the eastern sides of the Cuddapah and Kurnool districts. Dr. Cleghorn's Forests and Gardens of South India appeared, gathering up all his reports on the forests and their useful products. Dr. Bidie in 1862, gave a list of 111 woods, and the Catalogues of the Calcutta and Madras Committees for the Exhibition of 1862, gave to the public the first list that had appeared of the woods of Mysore, contributed by Captain Puckle, accompanied by smaller Madras lists from Drs. Hunter and Shortt, and from Mr. Pedro Coelho of South Canara, Dr. Brandis and the Moulmein Committee's lists of the woods of Pegu and Moulmein appeared in the Calcutta Catalogue, though Dr. Brandis' enumeration of, and invaluable practical remarks on, the woods of British Burmah, had been printed separately. Subsequent to the above, Captain (now Major Beddome) in 1863 gave a list of 531 trees growing in the Madras Presidency, though many, perhaps most of them, grow also in Ceylon, or other parts of South-eastern Asia. Of about one-third of these, the characters of the woods were already known, but Major Beddome's list of the year 1863 is the most complete that has as yet appeared of the trees of the peninsula of India, including as it does those already known to produce timber and fancy woods or such as may be examined for those products. The following is the list of the useful woods which Dr. Cleghorn reported on, at the Madras Exhibition of 1855:—

1 Acacia Arabica
Acacia catechu
Acacia leucophlœa
Acacia odoratissima
Acacia speciosa
Acacia sundra.
Adenanthera pavonina
Ægle marmelos
Ailanthus excelsa
10 Alangium decapetalum
Aquilaria agallocha
Areca catechu
Artocarpus hirsuta
Artocarpus incisa
Artocarpus integrifolia
Atalantia monophylla
Azadirachta Indica
Bassia longifolia
Bauhinia Richardiana
20 Bauhinia tomentosa
Bauhinia variegata
Berrya ammonilla
Bignonia suberosa
Borassus flabelliformis
Briedelia spinosa
Butea frondosa
Cæsalpinia coriaria
Cæsalpinia sappan
Calophyllum inophyllum
30 Careya arborea
Careya sphœrica
Caryota urens
Casuarina equisitifolia
Cathartocarpus fistula
Cathartocarpus Roxburghii
Cedrela toona
Chickrassa tabularis
Chloroxylon Swietenia
Cicca disticha
40 Citrus aurantium
Cluytia collina
Cocos nucifera
Cordia latifolia
Cyathea arborea
Dalbergia sissoides
Dalbergia sissoo
Dillenia pentagyna
Diospyros cordifolia
50 Diospyros ebenaster
Diospyros mabola
Diospyros melanoxylon
Ehretia lævis
Elate sylvestris
Emblica officinalis
Embryopteris glutinifera
Eriodendron anfractuosum
Erythrina Indica
Euphorbia tirucalli
60 Euphoria litchi
Eurya longifolia
Feronia elephantum
Ficus glomerata
Ficus Indica
Ficus infectoria
Ficus nitida
Ficus racemosa
Ficus religiosa
Ficus virens
70 Gmelina arborea
Gossypium acuminatum
Grewia tiliæfolia
Grewia, *Sp*
Guaiacum officinale
Guatteria longifolia
Guazuma tomentosa
Hibiscus lampas
Hæmatoxylon campechianum
Hura crepitans
80 Hydnocarpus inebrians
Inga dulcis
Inga xylocarpa
Jatropha multifida
Jonesia asoca
Kleinhovia hospita.
Kydia calycina
Lagerstrœmia microcarpa
Lawsonia inermis
Malphigia punicifolia
90 Mangifera Indica
Melia azadirach
Mimusops elengi
Mimusops hexandra
Michelia Rheedii
Morinda citrifolia
Nauclea cadamba
Nauclea cordifolia
Odina wodier
Parkia biglobosa
100 Pavetta Indica
Pimenta vulgaris
Poinciana regia
Pongamia glabra
Premna tomentosa
Prosopis spicigera
Psidium pyriferum
Pterocarpus Indicus
Pterocarpus marsupium
Pterocarpus santalinus
110 Pterospermum Indicum
Rottlera tinctoria
Salmalia Malabarica
Santalum album
Sapindus emarginatus
Schmidelia serrata
Semecarpus anacardium
Sethia Indica
Soymida febrifuga
Spathodea adenophylla
120 Spathodea, *Sp*
Sterculia fœtida
Sterculia guttata
Stereospermum suaveolens
Strychnos nux vomica
Strychnos potatorum
Syzygium jambolanum
Tamarindus Indica
Tecoma stans
Tectona grandis
130 Terminalia alata
Terminalia belerica
Terminalia Berryi
Terminalia catappa
Terminalia chebula
Terminalia glabra
Thespesia populnea
Thevetia neriifolia
Vachellia Farnesiana
Vatica robusta
140 [illegible]
Vitex alata
Vitex altissima
Wrightia antidysenterica
Wrightia mollissima
Wrightia tinctoria
146 Zizyphus jujuba

The following is the list of the trees of the Madras Presidency, which Major Beddome gave in the year 1863. It is the most complete that has ever being furnished :—

Acacia Arabica
,, planifrons
,, tomentosa
,, leucophlœa
,, ferruginea
,, catechu
,, sundra
,, suma
Actephila Neilgherrensis
Actinodaphne angustifolia
Acrocarpus fraxinifolius
Adansonia digitata
Adenanthera pavonina
Ægle marmelos
Agrostistachys Indica
Ailanthus excelsa
,, Malabarica
Aleurites triloba
Alseodaphne semicarpifolia
20 Alstonia scholaris
Alangium Lamarkii
Alphonsea zeylanica
,, lutea
Albizzia lebbek
,, odoratissima
,, amara
,, stipulata
,, procera
Amanoa patula
,, collina
Amoora rohituka
Anacolosa densiflora
Anacardium occidentale
Anona squamosa
Antiaris innoxia
Antidesma paniculatum
,, Bunius
,, diandrum
,, acuminatum
40 Apollonias Arnottii
Apodytes Benthamiana
Aporosa Lindleyana
Ardisia pauciflora
,, rhomboidea
,, paniculata
,, elliptica
,, polycephala
Artocarpus integrifolia
,, hirsuta
Areca Dicksonii
Astylia venusta
Azadirachta Indica
Balsamodendron Berryi
Bassia latifolia
,, longifolia
,, elliptica
Barringtonia acutangula
,, racemosa
Bauhinia tomentosa
60 ,, variegata
,, purpurea
,, parviflora
,, Malabarica
Bellschmiedia Roxburghiana
Berrya ammonilla
Bignonia xylocarpa
Bischofia Roeperianus
Blackwellia Ceylanica
,, tetrandra
Boswellia serrata
,, glabra
Borassus flabelliformis
Boehmeria Malabarica
Briedelia retusa
Bruguiera gymnorrhiza
Butea frondosa
Buchanania latifolia
,, angustifolia
,, intermedia
80 ,, lanceolata
Bursinopetalum arboreum
Callicarpa Wallichiana
Calosanthes Indica
Calophyllum decipiens
,, bracteatum
,, inophyllum
,, angustifolium
Calysaccion longifolium

Canthium didymum
,, umbellatum
Carallia integerrima
,, lucida
Careya arborea
Capparis grandis
Caryota urens
Cassia florida
,, Roxburghii
,, fistula
,, glauca
100 Cascaria ovata
,, tomentosa
,, coriacea
Catha montana
Canarium strictum
Cedrela Toona
Celtis Wightii
,, Roxburghii
Cerbera odallum
Ceriops Candolleana
Chickrassia velutina
,, tabularis
Chloroxylon swietenia
Chrysophyllum Roxburghii
Chionanthus intermedia
,, Malabarica
Cinnamomum zeylanicum
Cicca disticha
Citrus aurantium
Clausena Indica
120 Cleyera gymnanthera
Cleidion Javanicum
Cordia Myxa
,, Wallichii
,, Macleodii
,, Rothii
,, Perrottetii
,, serrata
,, monoica
,, polygama
,, obliqua
,, latifolia
Conocarpus latifolius
,, acuminatus
Cochlospermum gossypium
Cocos nucifera
Cocculus laurifolius
Coffea Arabica
Croton reticulatum
,, oblongifolium
140 ,, drupaceum
Cryptocarya Wightiana
Cullenia excelsa
Cylicodaphne Wightiana
Cynometra ramiflora
,, cauliflora
Cyathocalix zeylanicus
Cyclostemon zeylanicus
Dalbergia latifolia
,, sissoides
,, oojeinensis
,, sissoo
,, paniculata
,, frondosa
Daphniphyllum Neilgherrense
Desmostemon zeylanicum
Diospyros melanoxylon
,, Embryopteris
,, Ebenum
160 ,, exsculpta
,, montana
,, cordifolia
,, Goindu
,, chloroxylon
,, pruriens
,, insignis
,, sylvatica
,, ovalifolia
,, Candolliana
,, dubia
,, hirsuta
,, obovata
,, tomentosa (Bir)
,, paniculata
,, nigricans
Dimorphocalyx glabellus
Discospermum sphærocarpum

Dichrostachys cinerea
Dillenia pentagyna
,, speciosa
180 Dodonoea Burmanniana
Dysoxylon macrocarpum
Ehretia loevis
Elœocarpus serratus
,, oblongus
,, ganitrus
,, cuniatus
Elœodendron Roxburghii
Emblica officinalis
Entosiphon Indicus
Eriodendron orientale
,, anfractuosum
Eriochloena Hookeriana
Erythrina Indica
,, stricta
,, suberosa
,, sublobata
,, ovalifolia
Euphorbia tirucalli
Eugenia gracilis
200 Euonymus pterocladus
,, dichotomus
,, crenulatus
Evia amara
Excoecaria Agallocha
,, oppositifolia
Fagara.
Fagrœa Coromandelina
Falconeria insignis
Feronia elephantum
Ficus
Filiceum decipiens
Firmiana colorata
Flacourtia montana
,, Ramontchi
,, inermis
Garcinia purpurea
,, cambogia
,, pictoria
,, conicarpa
220 Garuga pinnata
Gardenia latifolia
,, lucida
,, gummifera
,, montana
,, arborea
Gelonium lanceolatum
Gironniera reticulata
Givotia Rottleriformis
Glycycarpus racemosus
Glochidion Neilgherrense
,, velutinum
,, nitidum
,, lanceolarium
Gmelina arborea
Gordonia obtusa
Goniothalamus Wightii
,, cardiopetalus
Gomphia angustifolia
Grewia tiliœfolia
240 ,, loevigata
,, abutilifolia
,, asiatica
,, Rothii
Grislea tomentosa
Guazuma tomentosa
Guatteria longifolia
,, cerasoides
,, suberosa
,, coffeoides
,, fragrans
Guettarda speciosa
Gyrocarpus asiaticus
Hassia Wightii
Hardwickia binata
Harpullia imbricata
Hedera obovata
,, rostrata
,, racemosa
,, acuminata
260 ,, venulosa
Heimicyclia sepiaria
,, venusta
Helicia Nilagirica
Hemigyrosa canescens
Heynea affinis
Heterophragma Roxburghii
Hernandia sonora
Holigarna longifolia
Holochilus micranthus
Holarrhena mitis
Hopea Wightiana
Hydnocarpus Wightianus
,, alpinus
,, venenata

Hymenodyction excelsum
,, obovatum
,, utile
Ilex. Wightiana
,, Gardneriana
280 ,, denticulata
Isonandra Wightiana
Ixora parviflora
,,
Jambosa pauciflora
,, Munronii
Jatropha
Jonesia Asoka

Kleinhovia hospita
Kandelia Rheedii
Kydia calycina
,, Roxburghiana
Lagerstræmia Reginæ
,, microcarpa
,, parviflora
Lasiosiphon eriocephalus
Lawsonia alba
Ligustrum robustum
,, Neilgherrense
Litsœa Zeylanica
,, oblonga
300 Limonia acidissima
,, alata
Lophopetalum Wightianum
Lumnitzera racemosa
,,
Maba buxifolia
,, nigrescens
Machilus macrantha
Macaranga tomentosa
,, Indica
,, Roxburghii
Mallea Rothii
Mangifera Indica
Mappia fœtida
Melanthesa rhamnoides
,, turbinata
Meliosma pungens
,, simplicifolia
,, Arnottiana
Melia composita
,, Azedarach
320 Memecylon ramiflorum
Michelia Nilagirica
,, Champaca
Microchlaena quinquelocularis
Microtropis Wallichiana
,, ramiflora
Miliusa Wightiana
,, velutina
,, Hookeriana
Millingtonia
Milnea Roxburghiana
,, apiocarpa
Mimusops Elengi
,, hexandra
,, kauki
,, Indica
Mischodon zeylanicus
Moacurra gelonioides
Monocera glandulifera
,, tuberculata
340 Monosis Wightiana
Moringa pterygosperma
Morocarpus longifolius
Morinda citrifolia
,, exserta
,, tomentosa
,, tinctoria
,, bracteata
Murraya exotica
Myristica attenuata
,, Malabarica
Myrsine capitellata
Nagela
Nauclea parvifolia
,, cordifolia
,, cadamba
,, purpurea
Nephelium longanum
,, stipulaceum
,, erectum
360 Nyctanthes arbor tristis
Ochna squarrosa
,, Wightiana
Odina Wodier
Olea Roxburghiana
,, polygama
,, dioica
,, glandulifera
Olea linocieroides

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Orophea erythrocarpa
,, Thomsonii
,, Heyneana]
Pajanelia multijuga
Phillyrea robusta
Phœbe paniculata
Phœnix sylvestris
Photinia Notoniana
,, Lindleyana
Phoberos crenatus
,, Wightianus
380 Pierardia macrostachys
Piliostigma racemosa
Pithecolobium umbellata
,, subcoriacea
,, bigeminum
,, dulce
Piptostylis Indica
Pittosporum Neilgherrense
,, tetrosperma
,, floribundum
Plecospermum spinosum
Plumieria alba
,, acuminata
Polyalthia cardiopetala
Pongamia glabra
Poinciana elata
Premna tomentosa
,, latifolia
Prosorus Indica
Prosopis spicigera
400 Protium caudatum
Psidium pyriferum
Pterocarpus santalinus
,, marsupium
Pterospermum Indicum
,, suberifolium
Putranjiva Roxburghii
Pygeum ceylanicum
,, acuminatum
Randia uliginosa
Rhizophora mucronata
Rhododendron arboreum
Rospidios vaccinioides
Rottlera tinctoria
,, muricata
,, digyna
,, mappoides
,, peltata
Saccopetalum tomentosum
Salix tetrasperma
420 ,, apiculata
Sagerea laurina
Salmalia Malabarica
Salvadora Wightiana
Santalum album
Sapium Indicum
Sapota elegenoides
Sapindus laurifolius
,, rubiginosus
,, emarginatus
,, deficiens
Sandoricum Indicum
Sarcoclinium longifolium
Schleichera trijuga
Schrebera Swietenioides
Semecarpus Grahamii
,, anacardium
Serissa Wightii
Sethia Indica
Shorea robusta
440 Solenocarpus Indica
Sonneratia acida
Soymida febrifuga
Spathodea Rheedii
,, crispa]
,, falcata
,, adenophylla
Sponia velutina
,, Wightii
Sterculia Balanghos
,, urens
,, villosa
Sterculia populifolia
,, fœtida
,, guttata
Streblus asper
Stereospermum chelonoides
,, suaveolens
Stylocoryne Webera
Strychnos nux vomica
460 ,, potatorum
Swietenia chloroxylon
,, chickrassia
Symplocos pendula
,, spicata
,, obtusa
,, racemosa
,, uniflora
,, nervosa
,, foliosa
,, Gardneriana
Syzygium caryophyllifolium
,, alternifolium
,, montanum
,, calophyllifolium
,, Arnottianum
,, jambolanum
Tabernœmontana dichotoma
Tamarindus officinalis
Taxotrophis Roxburghii
480 Terminalia bellerica
,, chebula
,, catappa
,, gella
,, glabra
,, coriacea
,, arjuna
,, paniculata
Tectona grandis
Tetrameles nudiflora
Tetranthera tomentosa
,, ligustrina
,, Roxburghii
,, monopetala
,, panamanja
,, Wightiana
,, glabrata
Thespesia populnea
Trewia nudiflora
Turpinia Nepalensis
500 Ulmus integrifolia
Unona discolor
,, pannosa
Uvaria villosa
,, tomentosa
Vaccinium Leschenaultii
Vachellia Farnesiana
Vangueria edulis
Vatica tambugaia
,, laccifera
Vitex altissima
,, pubescens
,, leucoxylon
,, alata
Walsura piscidia
Wendlandia exserta
,, tinctoria
,, notoniana
Wormia bracteata
Wrightia tinctoria
520 ,, Rothii
,, tomentosa
Xanthochymus pictorius
,, ovalifolius
Xanthoxylon Rhetsa
,, triphyllum
Xylia dolabriformis
Xylocarpus granatum
Zizyphus xylopyrus
,, glabrata
,, jujuba
581 ,, Wynadensis

See Amherst, Burmah, Canara, Central Provinces, Ceylon, Circars, Cuddapah, Ganjam, Moulmein, Mysore, Pegu, Penang.

MADU-KAH, the Tamil name of a Malabar and Canara tree, the wood of which is yellow and very small; its grain is close and heavy: it is not of much use or value.—*Edye, Forests of Malabar and Canara*

MADURA. A district in the south of the Peninsula of India. The slopes of the Pulni hills and Cumbum valley contain valuable timber.

MAGADAMBOOM, Tam. A Travancore wood, of a white colour, specific gravity 0·462, used for light work generally.—*Col. Frith.*

MAH YUH GAH, Burm. A tree of Amherst, Tavoy and Mergui, maximum girth 2½ cubits, and maximum length 18 feet. Abundant all over the Tenasserim and Martaban provinces. When seasoned it floats in water. It is used for elephant bells, but is not a durable wood.—*Captain Dance.*

MAI KIN, Burm. A tree of Moulmein. Wood used as an ordinary building material. Fruit used in medicine.—*Cal. Cat. Ex.* 1862.

MAINABAN, Burm. A Tavoy wood, used for bows, lances, beams, rafters, &c.

MAILAH, the Tamil name of a tree which grows to about twelve feet high and twelve inches in diameter. It is generally curved, and is used in boat-work. It produces a fruit which the wild pea fowl feed on; and is to be found in the forests of Malabar, and also in Ceylon.—*Edye, Forests of Malabar and Canara.*

MAI TAI YO, Burm. A tree of Amherst, Tavoy and Mergui, of maximum girth 2½ cubits, and maximum length 22 feet. Found abundant all over the province. When seasoned it floats in water. Its wood is used for posts and many other purposes by the Burmese, and it is a particularly good wood for helves, being durable, light and tough.—*Captain Dance.*

MALABAR, CANARA, COCHIN, TRAVANCORE and CEYLON TIMBERS. In the early part of this century, John Edye, Esq., of the Survey Department, Royal Navy, visited Southern India, with a view to ascertain the capability of the country to supply timber for the British Navy. He described the forests of the Malabar Coast and of Ceylon, and his essay descriptive of them and of their timber trees and fancy woods was read on the 16th May 1835, before the Royal Asiatic Society of Great Britain and printed at pages 324 to 377 of the second volume of their Journal. The 174 timbers and woods which he described were obtainable in the forests, above noted, which extend from Cape Comorin to Onnor (Honore), in the north part of Canara, being an extent of about 500 miles. The forests of Travancore and Cochin were and are still the property of native princes, but the northern parts and those of Ceylon belong to the British. Mr. Edye's descriptions were very

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complete in all relating to the qualities of the various woods, but the names he gave, were unfortunately in Tamil, Malcala, Canataka, Singhalese, Portuguese and Dutch, and the botanical names of only a few have been identified and a few more surmised. In the plan of this work, therefore, viz., describing each timber tree by its scientific name and subjoining the vernacular synonyms, there is much still to be done with Mr. Edye's list, if it is to be reduced to the botanical names. His list is as follows, and the few botanical names of recognisable trees are given :—

MALABAR AND CANARA.

Ahvi maram, Mal. Steam wood.
Ambalam, Mal. Wild mango.
Angely or Angilica, Mal. and Tam.
Anakuru, Tam.
Araile, Porrel, Attu, Itti, Mal.
Ardda, Mal.
Atti, Mal.
Beati-maram, Tam. Bombay Black wood. Eng.
Bellerom, Tam. Kyndle, Mal. and Can.
Bombur, Tam.
Boa or Boe, Tam. Poam, Mal.
Brallah, Mal.
Canjara, Tam. and Mal.
Cajom Mono, Mal. Cashew nut, Eng.
Chambogum, Tam.
Chari-maram, Tam. Acha maram, Tam. of Ceylon. Nuga-gaha, Tam. of Ceylon. Ebony. Eng.
Charu, Mal.
Chauna, Mal.
Cheru puna, Tam. and Mal. or Red Mast Poon.
Of Peon, Poon or Puna, there are other four sorts:
Karapa puna, Tam. Dark poon.
Malai puna, „ hill „
Vellai „ „ white „
Merchie „ „ which is very like American birch.
Chini, Tam., and Kasawha, Mal.
Choutal, Mal.
Cumbolo, Mal.
Devodah, Port., Tam. and Mal. Cedar of Libanus, Eng. Spanish cedar, Eng.
Dup-maram, Mal. and Tam. Nadenara, Mal.
Other two sorts of Dup-maram are,
Mandonna, Mal. ?
Paini Dup-maram, Tam. ? Vatica Indica.
Edanah, Tam.
Eddellah, Mal.
Elavum, Tam.
Ellande, Mal.
Elupe-Maram, Mal.
Eruppuna, Tam., and Eembuttapen, Mal.
Headie, Mal.
Horingi Tanga maram, Tam.
Horingi maram, Tam. Sapindus emarginatus. Soapnut. Soap apple.
Jambau, Can.
Kadda Pilow, Tam. River side Jack wood.
Kahlaru, Mal.
Kaley, Mal.
Kalsyam, Tam., and Gendle, Mal.
Kallow Mhow, Mal.
Kaludumam, Tam.
Kalu vilas marda, Tam ?
Kamalah, Tam. Halmilile, Singh. Somendille, Singh.
Kangu Vittu, Mal.
Kara-Kundle, Mal.
Karangely, Tam., and Karakili, Mal.
Kareovam, Mal.
Karincolu, Tam., and Karinjurah, Mal.
Karindagarah, Tam.
Karingatta, Mal.
Karnara Vette.
Karuatagarah, Tam. and Mal.
Kathukevi, Tam.
Khounay, Tam., Kakay, Mal. and Can.
Koir-pah, Mal.
Kurotu-palah, Mal.
Kurvah Tanga maram, Tam. Cinnamomum iners, Wild Cinnamon tree.
Madu-Kah, Tam.
Mallah, Tam.
Mangai or Mangoe, Mal. Mangifera Indica.
Marda or Marthu, Tam. and Mal., and Martha, Can.
Maruti, Mal.
Milulu, Mal.
Munchetty Maram, Mal.
Myhilenah, Tam., and Mylelu, Mal.
Myrole or Mirole, Tam and Mal.
Nalu, Tam.
Nanah, Tam.
Narah, Mal.
Navellu maram, Tam. Tongue wood.
Nelle Pale, Tam. Emblica officinale.
Nidam Paini, Mal.
Nilam-pala, Tam.
Nila Pala, Tam.
Orupu-lingi-maram, Mal.
Padri, Tam. and Mal.
Pallaga Payanye, Mal.
Pala Maram, Mal.
Paraty maram, Tam.
Patti Vayngu, Mal. Dogwood, Eng.
Paharu Palam Maram, Mal.
Perji, Mal.
Perra Maram, Mal., and Cola Maram, Tam.
Pong, Tam and Mal.
Porcal Paini, Tam. and Mal.
Pulli Maram, Tam. Tamarind
Punga Marum, Tam., Mal., and Puna Balle. Calophyllum, sp.
Puoam, Tam.
Puoam Parasom, Tam.
Shini, Tam. and Mal. Buttress Tree, Eng.
Talle Tanga, Mal. and Tam.
Tambogum, Tam., and Vanponga, Mal.
Tani, Tam. and Jellam, Mal. Water wood, Eng.
Tauna, Tam.
Tawni, Tam., and Taniki Marum, Mal.
Tek or Teak, Tam. and Mal. Tectona grandis.
Telle or Payane, Tam. and Mal., also Dupi maram, Tam.
Tembow, Mal. Black Heartwood. Eng.
Tibelebu, Can. and Mal. Nambogum, Mal.
Towtal, Mal.
Upputah, Mal.
Vardagour, Mal.
Vaw Karah, Mal.
Vayngie, Tam., and Mulu-Vengah, Mal. Pterocarpus marsipium.
Vellai Puna Pinu, Tam.
Vellai Venjah, Tam.
Velatti, Tam.
Velle-elow, Mal.
Velli-ellus. Tam.
Vellie Puna, Mal. Katpuna, Mal.
Vembah, Tam.
Venarah, Mal.
Vengendah, Tam. and Mal.
Ven-Teak, Tam., and Bellinger, Mal.
Vette Maram, Mal.
Villai Katti Marda, Mal.
Villai Marda, Mal.
Villa Vengah Tam. ?
Viram Pila or Jackwood, Tam. and Mal. Artocarpus integrifolia.

Timbers of Ceylon.

Attati, Tam.
Charlombi, Tam.
Chivendi, Tam.
Chomondri or Chalembry, Tam.
Ear gulie, Tam., or Iar gulie, Tam.
Hal, Tam.
Hatey or Arti, Tam.
Kandle, Tam.
Kanjurea, Tam.
Karangalle, Tam. Ebony, Charu maram, Tam. Acha maram, Tam. Nuga-gha, Can.
Kartuma, Tam. Wild mango.
Kartu-Nedenari, Tam.
Kartu Tangie, Tam.
Kartu Toda, Tam.
Karucne-wach, Tam.
Karudu, Tam.
Katamanak, Tam., and Minnley, Port.
Kauna, Tam.
Kayann, Tam.
Kueves, Tam.
Kula, Port.
Kuveama, Tam.
Maratina, Tam.
Mara-verie, Tam.
Marauda, Tam.
Margosa, Port., and Vembu, Tam. and Mal.
Marvulinga or Marvilingum-Maram, Tam.
Mocheal, Tam.
Mulmuraca, Tam.
Mungevenah, Tam.
Mutherie, Tam. Buratu, Port.
Nar-putte, Tam.
Naruvealy, Tam.
Narvell, Jambu, Tam. and Port. Eugenia jambolana.
Odre, Tam.
Pali, Tam., Irambu, Mal., Palari, Port. Iron wood. Eng.
Panichie, Tam.
Parcutille, Tam.
Pienche, Tam.
Piri, Tam.
Poverasie, Tam., and Santa Marie, Port. Ceylon Tulip tree.
Puna, Tam.
Punde-cyann, Tam.
Pungul, Tam. Pongamia-glabra.
Somendilla, Tam and Mal.
Halmile, Dut., Port.
Hameniel „
Satin wood, Eng. „
Tentukie, Mal.
Teru-Kundle, Tam.
Tiella, Mal. and Tam.
Vaghey, Tam.
Vanangu, Tam.
Vela Salu, Tam. White iron wood.
Velatte, Tam., and Ballanju, Port.
Velcana, Tam.
Velle Aere, Tam. White Aere, Anglo-Tam.
Velle Nealea, Mal.
Vell-viru, Tam.
Vengula-Cyam, Tam.
Veraetal, Tam.
Veram Pelow, Mal. and Tam. Jack wood.
Venda-Canara, Tam.
Vernangu, Tam.
Vipenie, Tam.
Virey, Tam
Vulocal or Vulosylum Maram, Tam.
Yarvini, Tam. Crawn, Port.

The descriptions given by Mr. Edye, of these woods, will be found under their respective Tamil, Canataka or Singhalese names. The following 20 woods were collected in 1846 by Dr. Gibson, Conservator of Forests in the Bombay Presidency, for Mr. Chapman, in connection with the projected "Great Indian Peninsular Railway" :—

Jamboo ; a very heavy wood.
Kad kud.
Kelaho.
Koompoly.
Kendel ; a heavy, strong, dark wood.
Kunganee.
Kursing.
Kumdee.
Marlee ; a very heavy, brown wood.
Ombah.
Pood goossa.
Rucoah korurah ; a very straight-grained wood.
Satannah ; a light, soft, close wood.
Sarrah.
Seeraas.
Sood beebo.
Sawree ; a white, soft, close wood, very light.
Teh pully.
Jamboo or Jambu, Mimosa xylocarpa. This tree grows to a large size and is much valued in house-building for its strength and toughness.
Mairtee. Pentaptera coriacea. A very common tree both above and below the ghats, wood durable, and used in house, boat and ship-building.

MALACCA WOODS. At my recent visit to Malacca, I was favoured by Captain Playfair with the following list of Malacca Woods, to which he added the meanings of the second or specific Malay terms :—

Marabow Tandow, horn	Beams.
Do. Saboot, husk	Furniture.
Do. Koniat, yellow	Carts.
Bilian Wangee, scented	Beams.
Do. Chingis ?	
Madang Katana, earthy	Beams.
Do. Pankat	
Do. Wangee, scented	
Do. Paw	Planks.
Do. Lawang	Beams.
Do. Koniat, yellow	Planks.
Do. Asam, sour	do.
Do. Tandow, horn	Beams.
Do. Sarindet	Planks.
Do. Kaladee	do.
Do. Seeny	do.
Toombooso, a beautiful tree	Beams, Posts.
Lamboosoo	Planks.
Kaleydang	Chinese Coffins, Boats.
Do. Batoo, stony	do. do.
Tampany	Planks.
Do Boorong, bird	do.
Do. Gadja, elephant	Inferior Beams.
Do. Batoo, stoney	Planks.
Tampooney	Beams.
Pow Kijang, deer	do.
Taraling	Cart-wheels, Beams.
Do. Batoo, stony	do. do.
Rassa, tasty	Beams.
Karantey	Planks, Gun-stocks.
Marlantry	Planks.
Minia Jantan, male oil tree	Tap Oil, Beams.
Gombang, musical instrument	Beams, Planks.
Marpoyan	Fishing Stake-piles.
Marpadang	do.
Marbatoo	Firewood.
Chengal	Posts under water.
Do. Batoo, stony	do.
Penang bai, good betel tree	Beams.
Pataling	do.
Do. Jantan, male	do.
Kalatmera, red	do.
Kalat Batoo, stony	do.
Do. Putey, white	Not used much.
Lanjer Boaya, alligator	Planks.
Madang do.	Ships' Planks.
Do. Biawa	Doors, Windows.
Kranjy Boorang	Beams, very bad.
Do. Papan	
Niatoo Balam	Planks, Barooties.
Do. Batool	
Kookoo Baming	Beams.
Rambootan Jantan	do.
Do. Pasir	do.
Patootoo	do.
Leeda Krabaw	do.
Saraya	Jaloor.
Do. Batoo	Planks, Barooties.
Doorian Doorian	Planks.
Grangan	do.
Kompass	Charcoal.
Do Jangtan	do.
Boonoot	Masts.
Bintangoor Batoo	do.
Do. Boonga	Purlins.
Do. Akar	
Glam	Posts under water.
Bras Bras	do. of houses.
Kanoodong Ootan	Planks.
Tempenis	Beams.
Pannaga	do.
Do. Asap	do.
Bromboog	Pagar Piles.
Pangawan	Ships' Planks.
Do. Balaw	do.
Do. Jangkow	Beams.
Glam	Jermal, Piles.
Do. Assam	do.
Do. Tikoos	Beams.
Marantee Pasa	Planks.
Do. Bookit	do.
Do. Kakait	do.
Kasambee	Pagar.
Pes'	Beams, hard.
Kayoo Arang	Ebony.
Alban	Ribs of Vessels.
Masboolow	Beams.
Mataklool	do.
Jambun Ayer Ootan	do.
Sial Manoan	do.
Marsawa	Jaloor.
Jankal Oolat	do.
Mankoodoo	Dying Cloth.
Sapang	do.
Sengalotong	Beams.
Toombooso Sama	Beams.
Sama Jawa	do.
Pagar Anna	do.
Tepis	Pagar, Yoke-Sticks.
Nepis Koolit	Shafts.
Lemabro	do.
Lama Jam	Beams.
Lais	Pagar.
Pasal Untoo	Jaloor.
Pasal	do.

Malacca woods sent to the Exhibition of 1862:—

Garro Wood.

Kalmooning.—It is possible that this wood which seems about as hard and close-grained as Box-wood might be tried at Woolwich to see if it could do for opening ends of rifle bullets.

Moodang, Tandoo (Sipoo?), Maraboo.—Furniture and Doors and Windows.

Kranjee.—Wheels, Buggy Shafts and Junks' Masts.

Mursawah.—Junks' Masts.

Julatong.—Making Coffins and Boxes.

Jamah.—Common house-work, doors, &c.

Pawang.—Boat-building.

Rengas.—Furniture.

Serayah.—Doors, Windows and ordinary floors.

Mudang.—House-fittings.

Kuning.—Boat purposes.

Samarang.—House-fittings.

Caswarina.—Felloes for Wheels and Spokes.

Mangrove.—Piles.

Pinagah.—Boats' knees.

Malow.—Junks' Masts.

Tampenis.—House-building.

Balow.—Piles and Junks' Masts.

Changal.—Ships' lower Masts.

Trabang.— do.

Cladang.—Doors and Windows.

Do.—Carvings.

Kompas.—House-building.

Teak, Daroo.—Building.

Marabow, Billian Wangee, Madang Katana, Pannaga.—These four species are the very best description of timber procurable in Malacca, and command a market at very high prices, they are strong, solid and very durable, principally used for Girders, Rafters, Joists, Door and Window Posts, and Timber for Bridges; they stand the sudden changes of the climate remarkably well. Marabow is also used for furniture, never subject to dry-rot, and when well seasoned, known to last nearly half a century.

Patalin, Klat Mera, Rassa.—These varieties hold a second position in the art of House-building, but much more commonly used being more abundant and easily procurable. Patalin and Klat Mera are commonly used for Door and Window Frames, but Klat Mera is apt to split in the sun, consequently always used within doors in the Straits.

Tumboosoo, Glam, Brombong.—Best and most durable species of timber, known to resist the effects of a damp soil; invariably used for foundation piles, palisading and supporting piles for pile-bridges. Tumboosoo and Glam sawn into planks are the very best description of timber that can be used for the platform of a Timber Bridge supporting a gravelled road.

Traling, Marsawa Pasal Antoo.—These three trees grow to an enormous height and girth with huge buttresses which are eagerly sought for solid Cart Wheels in common use among the Malays, and the trunks are converted into Jaloors or River Boats, consisting of one solid block scooped out in the shape of a canoe.

Bintangore Batoo, B. Akar, B. Boonoot.—Tough, hard, crooked-grained, fibrous wood in general use for masts and spars of vessels. Bintangore Batoo is often used for Purlins among the natives.

Marpoyan, Marbatoo, Marpadang.—Used for fishing stakes, piles, and the best description of fuel for Steamers, makes very good Charcoal for Blacksmith's forge.

Madang Kuniet, M. Pao, M. Klade, M. Lawang, M. Saraya Batoo, Marantee, Naitoo, Doorian Doorian.—These varieties are in general use for Planks and Barotties or Tile lathes excepting Madang Kuniet, which being soft and cohesive, is used by the Chinese for carvings. Marantee is very inferior quality and only used by the poorer classes, great quantities being brought down to market as floats for heavier description of timber.

Kumpas only used as charcoal which is of excellent quality and much used by the Tin-miners.

Klaydang.—Used principally by Chinese for coffins and planking Vessels.

Minia Jantan.—The wood oil of commerce is tapped from this tree and it yields tolerable good planks for Bridges.

Kranjee.—This is a good, heavy valuable timber, somewhat like Ironwood used for machinery, mortar and pestle, &c.

Alban.—Used for Ribs of Vessels and Boats.

Enaanna.—Close-grained, mottled and valuable wood for furniture, it takes a high polish, and when well seasoned does not warp.

K[illegible]ey.—Employed for gun-stocks, it is a white soft wood, close and compact, fit for turning purposes.

Gelotong.—Light pithy wood, coarse-grained and porous, used for sandals and stoppers for bottles and covers for cooking utensils.

Neepis Koolit.—Light and pliant, used for Oars and Buggy Shafts.

Pangarawan.—A very valuable tree, the bark is used in lieu of planks by the poorer classes of natives, the trunk yields excellent planks for ship-building and the valuable gum known in commerce as damar mata-kooching or Gum Copal, is procured from this tree.

Kambey Dahoon.—Good for planks, and the tree yields Damar Batoo, a coarse rosin, much used in manufacturing torches.

Rangas.—Redwood, much used for furniture.

Kamooning.—This tree is not indigenous to the place, but thrives very well in private grounds, it yields superior planks for manufacturing small boxes; and the roots, not unlike Kayoo bookoo, are made into handles for Krisses.

Glam Tambaga.—Used for Piles and Posts under water, the paper-like bark is much used by the Malays in caulking the seams of Vessels.

Glam tree bark, is used as oakum for ships.

The four woods, Marabow, Bilian Wangee, Madang Katana and Pannaga, are the best timber obtainable in Malacca. They are strong, solid and durable, and are used for girders, rafters, joists, door and window posts and timber for bridges. They stand sudden changes of climate. Marabow is also used for furniture, is never subject to dry rot, and when well seasoned, lasts for fifty years.

Patalin, Klat Mera and Rassa, are three woods of Malacca, used in house-building, but inferior to Marabow, Bilian Wangee, Madang Katana and Pannaga. The woods called Patalin and Klat Mera are used for door-posts and window frames, but Klat Mera is apt to split in the sun.

Malacca woods sent to the Universal Exhibition of 1862.

Kampas.
Tumpang.
Juntangmalah.
Rungas.
Champadah Ayer.
Tampineh.
Nangka pipet.
Kiat.
Jelulong.

MALA-KA, Burm. A Tavoy wood, small sized, but strong; useful for handles.

MALA-KA, Burm. In Amherst a timber used for gunstocks and carpenters' tools; it is a close, compact, but small-sized wood, fit for hand-spikes, wheel-spokes, and the like. —*Captain Dance.*

MALAY PENINSULA. Notices of many of the timbers of this peninsula will be observed, under the heads of Amherst, Burmah, Malacca, Moulmein and Tavoy; and, doubtless, many of the woods used in Penang and Singapore, are brought from the mainland. The following is a list of 26 woods of the peninsula which were sent to the Exhibition of 1851, by the Singapore Committee.

Kledang.
Beliong.
Changis.
Klat.
Timbusu.
Kaya bromhong.
Angsanah.
Tampinis.
Tanpang.
Kranji.
Slumar.
Simpoth bukit.
Krantai.
Kamuning.
Simpot ryah.
Merbow.
Medangsi miniak.
,, Buah yeah.
Medangsi konit.
,, kitanahan.
,, tandoh.
Billion wangi.
Jambu-ayer-utan
Poragah.
Kaya arang.
Leban.
Ranggas.

—*Singapore Catalogue of the Exhibition of 1862.*

MALILER. In Penang, a small tree; wood white colour, used for boxes and ornamental work.

MALLY VELLY RAVAH, Tam. In Travancore, a wood of a light-brown colour, specific gravity 0·664. Used for building houses only.—*Colonel Frith.*

MANDARA. A Penang wood, of a pale red colour, specific gravity 0·939. A small tree; used for ornamental furniture.—*Colonel Frith.*

'**MANEE AUKA**, Burm. A tree of Moulmein. Wood used for ordinary house-building purposes. The bark is used medicinally.—*Cal. Cat. Ex.* 1862.

MANEOGA, Burm. According to Major Benson, one of the Cinchonaceæ, its peculiarity of grain, which resembles oak, would make it useful for decorative purposes: very brittle.—*Major Benson.*

MANEEOGA, Burm. According to Captain Dance, stated by Burmese to be much used for rice-pounders. Its maximum girth 4 cubits and maximum length 30 feet Abundant all over the Tenasserim and Martaban provinces. When seasoned it floats in water. It is not a good wood, as, when stored, it soon dies and rots; the roots are used for medicine; the fruit is eaten by Burmese, and the wood is well spoken of, though favorable specimens had not been seen, by Captain Dance. (*Note.*—Are the last three woods identical?)

MANGIFERA. A genus of plants belonging to the natural order *Anacardiaceæ.* Three or four species of this genus are enumerated—as *M. fœtida* of Loureiro, a native of Cochin-China and the Moluccas: *M. laxiflora,* indigenous in Mauritius; *M. Indica,* the mango tree of India, is cultivated everywhere, and *M. sylvatica* of Roxburgh, a native of the hilly districts bordering on Sylhet, where it grows to a great size, and is called Lukshmee-Am. It bears a fruit which ripens in February and March, and is eaten by the natives, though not so palatable as even a bad mango. It is also dried and kept by them for medicinal purposes. *M. oppositifolia,* Roxburgh, a native of Rangoon, was proposed by Messrs. Wight and Arnott to be formed into a distinct genus. The following merit distinct notice as trees yielding timber.

MANGIFERA ATTENUATA.

Tawsa thayet. Burm.

Found in the Pegu and Tounghoo Forests, but scarce; wood dark-brown.—*McClelland.*

MANGIFERA FŒTIDA, *Loureiro.* Horse Mango. This is a large mango cultivated at Mergui, and quite a favorite

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with the natives. It has an odour resembling the dorian, and like that has been introduced from the Straits. Wood not known.—*Dr. Mason.*

MANGIFERA INDICA, *Linn.*; *Roxb.*; *W. & A.*

M. montana, *Heyne.*
M. domestica, *Gærtn.*, *Rheede.*

Am. BENG.
That-yat. BURM.
Mavena CAN.
Mango. ENG.
Am. HIND.
Palam. JAV.
Kapalam. LAMPUNG.
Ampalam. MALAY.
Mampalam. ,,
Mava. MALEAL.
Makandamu. SANS.
Ætamba-gaha. SINGH.
Ma maram. TAM.
Mamari. TEL.
Mavi. ,,
Mamidi chettu. TEL.
Ela (fragrant) mavi. ,,
Guiju (dwarf) mamidi. ,,
Racha mamidi. ,,
Tiyya mamidi. ,,
Ambo. URIA.

A tree generally diffused over all the warmer parts of Asia : and it extends as far north as 30°, growing in the N. W. Himalaya up to 3,500 feet with a girth of 10 to 12 feet. It takes, there, 60 years to attain its full growth ; it has been successfully introduced into the West Indies. It is indigenous in Ceylon, where it is one of the most gigantic of their forest trees and the wild mango fruit is about the size of an English plum. It grows to a great size, with an erect trunk, and dark-coloured cracked bark. Its flowering time is January, February and March : the fruit ripens in May, June and July, and is one of the most grateful fruits of the tropical parts of Asia. The wood is of a dull grey colour, porous, yet pretty durable if kept dry, but soon decays if exposed to wet, of the effect of which it is very sensitive. In very large old trees it acquires a light chocolate colour towards the centre of the trunk and larger branches. This is hard, closer-grained, and much more durable. It is generally used for constructing massoolah boats and for packing cases, the cabinet makers at Madras prefer it to other wood for veneering on : it is also generally used by coach builders, cabinet makers and others, where common light wood is required, being the cheapest wood obtained. It is but little used in Coimbatore, as many much better woods are there procurable ; but, in Southern India, is employed generally for packing cases, boarding and rough work. The Bareilly chairs are made of this wood. Mr. Rohde also mentions that the wood has the property of holding a nail faster than any other timber. In Madras, it is one of the most common woods used for backs and linings of furniture. Mr. Edye remarks that many trees are found three feet in diameter, and thirty feet high, that the wood is of a whitish colour, and is not durable or of much value, but that the natives make canoes of it. Dr. Gibson says it is a very serviceable wood for planks, when not exposed to wet, and is much used for house purposes, but much less for carts. It seems to bear the action of salt water better than that of fresh ; is hence used for canoes. It could be readily creosoted. Captain Puckle mentions it as used in Mysore for the solid wheels of country carts, and rough furniture. The kernels are large and seem to contain some nourishment, they are, however, made no use of excepting during times of scarcity and famine, they are then boiled in the steam of water and used as an article of diet. The engrafted fruit is much prized by Europeans. Propagating by layers, and grafting by approach, are the only modes of certainly continuing fine sorts, as well as of improving them. These have the advantage also of bearing when small in size, that is, only a few feet in height, and therefore well suited for culture in the hot-houses of Europe.—*Roxb.*, *Edye, Forests of Malabar and Canara, Captains Macdonald, Beddome and Puckle, Cal. Cat. Ex. of* 1862, *Elliot's Flora Andhrica, Mr. Rohde in Madras Cat. of* 1861, *also MSS., Eng. Cyc. Drs. J. L. Stewart, Gibson, Wight and Cleghorn, Madras Ex. Jury Rep.* 1855, *Madras Cat. Ex.* 1862, *Lt.-Col. Lake, Mr. Powell, Mr. Fergusson.*

MANGIFERA OPPOSITIFOLIA. ?

Mayan. BURM.

A tree of Moulmein. Wood used for building purposes. Fruit edible.—*Cal. Cat. Ex.* 1862.

MANJA CADAMBOO, TAM. ? In Travancore, a wood of a light yellow colour : used for packing cases.—*Col. Frith.*

MANKADU. In Penang, a wood of a brown colour. A kind of Damar lout, much used for beams.

MANNY MAROOTHA, TAM. Wood of a flesh colour, used for carts and in building houses.—*Col. Frith.*

MARATINA, the Tamil name of a Ceylon tree which grows to about twenty inches in diameter, and from fifteen to twenty feet in height. It is sometimes used by the natives for house and boat work.—*Edye on the Timber of Ceylon.*

MARAUDA, the Tamil name of a Ceylon tree, which is very heavy and close-grained. It is one of the best sorts of Ceylon wood ; of a dark-brown colour, and grows to about twenty inches in diameter, and twenty feet in height.—*Edye on the Timber of Ceylon.*

MARAVA, CAN. ? A wood of South Canara, used for building purposes.—*Mad. Cat. Ex.* 1862.

MARA-VERIE, the Tamil name of a Ceylon treq which is much the same as the Vell, verie in size and quality. It is used for natives' hu[illegible] &c., but is not of much value.—*Edye on the Timber of Ceylon.*

MARDA OR **MARTHU**, *Tamil, Maleala,* **MARTHA** *in Canataca.* This tree of Malabar and Canara is of large dimensions and perfectly straight, it is of a dark-brown colour and very close-grained ; many trees are to be found on the banks of the Maletur river, of a hundred feet long and about twenty-four inches in diameter. From the apparent qualities and native uses of this wood, there is no doubt that it might be converted with advantage into plank, thick-stuff, beams, &c., for ships, where strength is required, and where weight is of little consideration. It runs from sixty-two to seventy pounds the cubic foot, when green : the native carpenters use it with the teak for beams in the pagodas, &c. ; it is considered durable ; and contains a quantity of oil. The forests in Travancore abound with trees of this sort, which can be obtained on the rivers' banks, an important consideration in the expense of procuring such valuable woods. There is an inferior description which is named "Villai Marda," or White Marda ; it much resembles the former tree, excepting in size and in leaf, both of which are considerably smaller, and it is said by the natives to be inferior in quality and durability ; it is more like the English oak in grain than any wood Edye met with. These trees, and also the former sort, are found in patches of some hundred together, and generally on the banks of rivers. There is another sort named "Villai Katti Marda," which is the White Lump Marda. This tree grows to about twelve or fifteen inches in diameter, and twenty-five feet long. In Malabar there is another sort, which is well known to the natives by the name of "Kalu Vithe Marda," the Dark Stone Marda, and may be considered of the same quality as the last sort. It is used for the frames of vessels, and many other purposes, for which it answers well.—*Edye, Forests of Malabar and Canara.* (*Note.*—These seem to be species of Terminalia, probably T. alata, T. Berryi, T. chebula and T. glabra.)

MARGOSA, the Portuguese name, and Vembu, the Tamil and Malayala names of a Ceylon tree, which grows from 18 inches to three and a half feet in diameter. In appearance it is much like mahogany, and is used by the natives for general purposes. It produces a fruit from which an oil is extracted which is used medicinally.—*Edye on the Timber of Ceylon.* (*Note*—This seems to be the Azadirachta Indica.)

MARIBOT. A very large tree in Penang ; wood of a purple colour ; specific gravity 0·939. Difficult to work, but used for furniture.—*Col. Frith.*

MARLEA BEGONIFOLIA, *Roxb.*

Til patra of Jhelum and Kaghan.
Chit " "
Kurkni "
Prot of Kangra.
Sialu on the Wurdwan, Kashmir.
Padlu on the Ravi.
Budanar, memoka of Kangra.

A handsome small tree with maple-like leaves, grows in the N. W. Himalaya, at 3,200 to 6,000 feet. It is the M. affinis of some writers ; quite an Eastern Himalayan species, but occasionally known in Kaghan and Kashmir.—*Mr. Powell, Dr. J. L. Stewart.*

MARTABAN TIMBER TREES. Martaban being merely opposite Moulmein, cannot have timbers different from those enumerated as Moulmein woods. The immediate vicinity of the town of Martaban which I recently visited, is bare of trees. Dr. Wallich noticed the following timbers of this province :—

Calophyllum, Thurappe, BURM., a large tree, used for masts and spars.

Careya, Zaza, used for posts, &c.

Cynometra, Maingga, a small tree.

Diospyros ? Ryamucha, used in house-building.

Elæocarpus, very large timber : used for masts and house-posts.

Fagraea fragans, Annah-beng, compact, hard, yellow, and very beautiful wood ; little used.

Gordonia ? Zaza, large common timber.

Hopea odorata, Tengaun, an immense tree.

Meenaban, a durable pliant wood.

Pongamia atropurpurea, Lagun, a noble tree used in boat and house-building.

Quercus Amherstiana, Tirbbæ, a large tree ; used in boat-building.

Tectona garandis, teak wood.

Terminalia bialata.

Xanthophyllum, Saphew, a very large tree ; used for posts and rafters.

Pterospermum Indicum, Lingoa wood, or the Amboyna wood of commerce, is from Ceram in the Moluccas. It was imported in considerable quantities into Great Britain during the period in which the Moluccas were British possessions. This wood, which is very durable and capable of a high polish, is abundant at Ceram, New Guinea, and throughout the Molucca seas. It can be obtained in any quantity, if the precaution is taken of ordering it during the previous trading season. The Kaya Buka of commerce is the gnarled excrescence of this tree.

Large circular slabs of the Lingoa wood, from Ceram, 6 feet to 9 feet in diameter are obtained by taking advantage of the spurs which project from the base of the trunk, as the tree itself has not sufficient diameter to furnish such wide slabs. They are occasionally met with as large as 9 feet, but the usual size is from 4 to 6 feet.

Kaya Buka is obtained from the Moluccas, from the knotty excrescences which are found on the stems of the same tree. It is brought to Singapore by the Eastern traders from Ceram, Arru and New Guinea, and is sold by weight. It is much esteemed as a fancy wood.

MARUTI, the Malayala name of a Ceylon tree which grows to about fourteen inches in diameter, and from twenty to twenty-four feet high. It produces a fruit which the natives use as a medicine, and from which, also, they extract an oil which they use in lamps, and in anointing the body after bathing.—*Edye, Forests of Malabar and Canara.*

MARVULINGA, OR **MARVILINGUM MARAM**, the Tamil name of a Ceylon tree which grows to about sixteen inches in diameter, and eight feet high. It is praised by the Natives for sandals and toys, &c. It produces a kind of pod, which, with the bark and leaves, is used with much success in cases of intermittent fevers.—*Edye on the Timber of Ceylon.*

MARYA CADAMBA, Tam. ? A Travancore wood, of a yellow colour ; used for packing cases.—*Col. Frith.* (*Note.*—Is this a species of Nauclea ?)

MAROOTHOO, Tam. ? A Tinnevelly wood of a white brown colour, used in building in general.—*Col. Frith.*

MASKAW. A Penang wood of a light brown colour ; specific gravity 1·016. Used for palankeens, carriages, furniture, &c.—*Col. Frith.*

MASOODAH, Tam. ? Qu. Maroodah ? A Travancore wood of an ash colour, 2 to 8 feet in circumference ; used for building.—*Col. Frith.*

MATHA, Hind. ? A tree of Chota Nagpore, with a hard, white timber.—*Cal. Cat. Ex.* 1862.

MATHGIRIE VAMBOO, Tam. In Tinnevelly, a wood of whitish-brown colour when young, and is a strong light wood : used for general purposes. When old, it is of a red colour, but still is a strong light wood.—*Col. Frith.*

MA-THLOA, in Amherst, a timber used for house posts ; probably Artocarpus integrifolius, or jack-wood.

MAWAN, Hind. A tree of Chota Nagpore, with a soft, grey-wood.—*Cal. Cat. Ex.* 1862.

MAY-BYOUNG, Burm. A tree of Tenasserim, Amherst, Tavoy and Mergui, of maximum girth 3 cubits, and maximum length 18 feet. Not abundant, but found near the sea-side, and near the mouths of rivers along the coast. When seasoned, it sinks in water. It is used for anchors of boats, and for the sticks of oil mills ; it is an uncommonly heavy and a durable wood, but not tough enough for ordnance purposes generally, though from its hardness, it makes good planes and turns well. Dr. Mason says it is a hard, tough, knotty wood, which the Tavoyers select for anchors to their large boats, wooden anchors laden with stones constituting the greater part in use in 1852. He had never seen the tree.—*Captain Dance, Dr. Mason.*

MEET-GNYOO, Burm., or NEET-GNYOO, Burm. A fruit tree of Amherst, with a red-coloured, useful, strong, heavy wood, probably a species of Acacia.

MEGEONE, Burm. In Tavoy, a large tree used in building.—*Dr. Wallich.*

MEHRA FOREST, Hazara. The following timbers were sent from this forest to the Exhibition of 1862 :—

Walnut. Juglans.
Toon. Cedrela.
Biar. Pinus longifolia.
Ash. Fraxinus.
Reen. Quercus.
Yew. Kayan.
Fir (Pinus longifolia.)
Kalanath. Cerasus.
Olive.
Buroongi.
Umloke.
Mulberry.
Loon. Pyrus.
Kungur or Kukker. Fraxinus.
Diar or Deodar. Cedrus deodara.

—*Cal. Cat. Ex.* 1862.

MELANORRHÆA USITATISSIMA, *Wall.*

Thit-si. Burm.
Varnish tree. Eng.
Burmese varnish tree. ,,
Lignum vitæ of Pegu.
Kheu of Munipur.

This tree grows from Munipur southwards to Tavoy. It was first seen near Prome, but is found in different parts of Burmah and along the coast from Tenasserim to Tavoy, extending from the latter in 14° to 25° N. lat., and Dr. Wallich has identified it with the Kheu or varnish-tree of Munipur, bordering on the north-east frontier districts of Sylhet and Tipperah. It grows plentifully at Kubbu, an extensive valley elevated about 500 feet above the plains of Bengal, and 200 miles from the nearest sea-shore, and it attains its greatest size there, some of the trees having clear stems of 42 feet to the first branch, with a circumference near the ground of 13 feet. It forms extensive forests, and is associated with the two staple timber trees of continental India, teak and saul (*Tectona grandis* and *Shorea* or *vatica robusta*), especially the latter, and also with the gigantic wood-oil tree, a species of *Dipterocarpus*. It is in full foliage during the rainy season, which lasts for five months, from the middle of May until the end of October. It is rare in the Irrawaddy valley, but common in the forests east of the Sitang river, particularly south-east of Sitang Town. It is very common above the parallel of Tounghoo and grows there to a girth of six feet, and it is plentiful in the Tounghoo and Prome Forests, especially in the former. It is found very abundant in Amherst provinces, and grows in Tavoy and Mergui. Captain Dance says that its maximum girth is certainly 3 and said to be 4 or 5 cubits, and maximum length certainly 20 and said to be 30 feet ; and Dr. Brandis tells us that, in a full grown tree on good soil, the average length of the trunk to the first branch is 30 feet, and average girth measured at six feet from the ground is 9 feet. Its wood is the Lignum vitæ of Pegu, and is of a dark-red colour, or a dark-brown, dense of structure, and of particularly fine close-grain. Of extreme closeness of grain and density of structure, it has a specific gravity so great, that it serves in place of iron as anchors for native boats. A cubic foot weighs lbs. 54, but it is not brought to Moul-

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mei[illegible] heavy as Dr. McClelland describes it. When seasoned it floats in water. It is very strong, durable, hard and tough, it is found to answer well for cogs of machinery, (vide Artillery Records with report of woods by Captains Simpson and Babington, dated Moulmein 25th May 1842) and is used by the Burmese for tool helves and the stocks of their wooden anchors, &c. For, the anchors of Burmese boats are always of wood to which stones are lashed, the flukes being of Pyeng Khadoe, and the stocks of Theetsee or of some other heavy wood. Its great hardness and weight prevent its being employed in house-building ; but, it would answer for sheaves or block-pulleys and other purposes connected with machinery, where great strength and density are required. It is therefore recommended for handles of tools, also of sheave blocks, for machinery generally, for railway sleepers, for gun-stocks, for rammer heads, and for helves, in *short* for all purposes where a strong yet not very heavy wood is useful. It exudes a black gum which repels ants, and is used by the Burmese as a varnish. At Prome a considerable quantity of this varnsih is extracted, but very little at Martaban. It is collected by inserting a pointed joint of a bamboo, which is closed at the other end, into wounds made in the trunk and principal boughs, which are removed after 24 or 48 hours, and their contents, which rarely exceed a quarter of an ounce, emptied into a basket made of bamboo and rattan previously varnished over. The collecting season lasts from January to April. In its pure state it is sold at Prome at about *2s. 6d.* for about 3½ lbs. avoirdupois. It is procurable in great quantities from Munipur, where it is used for paying river-craft and for varnishing furniture and vessels intended to contain liquids. The drug is conveyed to Sylhet for sale by the merchants who come down annually with horses and other objects of trade. In Burmah, Dr. Wallich states that almost every article of household furniture intended to contain either solid or liquid-food is lacquered by means of it. The process consists in first coating the article with a layer of pounded calcined bones, after which the varnish is laid on thinly, either in its pure state or variously coloured. The most difficult part consists in the drying. It is also much employed in the process of gilding ; the surface, being first besmeared with this varnish, has then the gold leaf immediately applied to it. Finally, the beautiful Pali writing of the Burmese on ivory, palm-leaves, or metal, is entirely done with this varnish in its native and pure state. —*Voigt, quoting Wallich, Drs. McClelland, Mason and Brandis, Cal. Cat. Ex.* 1862, *Captain Dance.*

MAY-KLIN, Burm. A Tavoy timber, used for rudders and anchors.—*Dr. Wallich.*

MAY-MAKA, Burm. A Tavoy timber, used in ship-building.—*Dr. Wallich.*

MAY-RANG, Burm. A Tavoy timber, said to be very durable.—*Dr. Wallich.*

MAY-SHOUNG, Burm. A tree, of maximum girth 2½ cubits, and maximum length 18 feet. Scarce, but found on the sea coast from Amherst to Mergui. When seasoned, it floats in water. It is a short fibred, brittle, yet soft wood, called, but erroneously, a kind of Annan by the Burmese. It is not a durable wood, and is, besides, too scarce for ordnance purposes.—*Captain Dance.*

MAY-TOBEK, Burm In Tavoy, a wood used for the bottoms of ships ; preferred to teak.—*Dr. Wallich.*

MAY-YAM, Burm. ? A Tavoy timber, an indestructible, strong, heavy, dark-red wood.—*Captain Dance.*

MAZA-NENG, Burm., or MAG-ANENG, Burm. In Amherst, a close-grained wood, nearly allied to teak. It is used for house posts, carts, boats, paddles, oars, &c.

MEE-KYAUNG-KYAY, Burm. In Tavoy, a heavy wood, not attacked by insects. —*Dr. Wallich.*

MEENABAN, Burm. Tavoy · Lance-wood, Eng., regarded by Dr. Mason to be one of the Apocynaceæ. A tree in Martaban, Tenasserim, Amherst, Tavoy and Mergui, of maximum girth 1½ cubits, even in Tavoy and Mergui where largest, and maximum length 12 feet. Found in moderate quantities in Tavoy, Mergui and the adjacent islands ; also in smaller scantling and scarcer in Amherst province. When seasoned, it floats in water. It is used by the Burmese for bows, spears, walking sticks, dha and chisel handles, &c., and is an excellent tough, hard, elastic, pliant and durable wood, bears a beautiful polish, and makes excellent furniture, when wanted in but small size only. It is much recommended for handles of screw-drivers, hammers, planes, and all kinds of tools ; also for all purposes for which a close-grained heavy wood is required. (*Vide* Major Simpson's Report.) Does not seem to stand exposure to the direct rays of the sun well, but under cover is found to be a thoroughly good wood for planes, for which this is especially recommended, also for screw drivers and all kind of turning. This is good for all those purposes for which box is now imported.—*Captain Dance, Dr. Wallich.*

MEEP-THU-ABAN, Burm. In Tavoy, a small-sized, compact, grey wood : used for handles, &c.—*Dr. Wallich.*

MELIA, *Species.*

Hulanhick. SINGH.

A tree of the Central province of Ceylon, the wood of which is used in house-building: a cubic foot weighs lbs. 39, and it is esteemed to last 50 years.—*Mr. Mendis.*

MELIA AZEDARACH, *Linn.*

M. sempervirens, *Swartz.* | M. composita, *Willde.*

Bavena.	CAN.	Pride of India.	ENG.
Bayvena.	,,	Drek.	Hind. of Panjab.
Lilac.	ENG.	Nim.	HIND. & MAHR.
Bead tree.	,,	Male vempu.	TAM.
Persian lilac.	,,	Vepa mane.	TEL.
Common bead tree.	,,	Turka vepa.	,, .
White cedar.	,,		

Its flowers.

Nim ka phul.	DUK.	Vaypa puvvu.	TEL.
Vaypum pu.	TAM.	Its seed Hab-ul-ban.	

This grows in the Concans and Dekkan, in the north of India and in China. It grows in the N. W. Himalayas up to 6,000 feet. It flowers during the hot season, which makes it liked by the people for its shade, and it is then of very great beauty. Writing from the Panjab, Dr. J. L. Stewart says its wood is yellowish, soft, brittle and weak, but is bitter and not subject to the attacks of insects. In Bengal it is used for making idols, and in Sind, it is used for well-curbs.—*Roxb.*, ii, 395, *Voigt, Drs. O'Shaughnessy, Wight, Gibson, Cleghorn and J. L. Stewart.*

MELIA COMPOSITA, *Willde.*

Melia superba, *Roxb., Flor. Ind.*, ii, *p.* 396.

Neembara.	MAHR.	Lunu midella.	SINGH.

A great tree of Ceylon, of Mysore, found near the Parr ghat, is not uncommon in the Konkan jungles, and seen occasionally in Guzerat, where its very light wood is used in making frames for native drums. In Ceylon it is used for ceilings and for out-riggers of boats. The wood is of good quality, but inferior in strength and durability to that of Azadirachta Indica, the common or mountain Neem.—*Roxb.*, ii, 396, *Voigt, Dr. Gibson, Mr. Fergusson.*

MELIA ROBUSTA, *Roxb.*

A large tree of quick growth, native of the Konkan, Mysore and Malabar.—*Mr. Rohde, MSS.*

MELIA SEMPERVIRENS, *Roxb., Flor. Ind.*

Melia bukayun, *Royle.*

Ban.	AR.	Bukayun.	HIND.
Bam.?	,,	Bukarjun.	,,
Maha nimba.	BENG.	Daracht-i-azad.	PERS.
Bukayun.	ENG.	Bukayun, Bukain.	,,
Evergreen Bead tree.	ENG.		

This is a smaller tree than the M. azedarach—the flowers bluish. It is common at Ajmeer; as is also the large deciduous variety. This is the chief tree in Northern India gardens, being very ornamental when in blossom and odoriferous. It grows in Persia, Nepaul and Kumaon, but, so far as is known, is not seen in Peninsular India. Nevertheless, Dr. Gibson thus notices the "Melia azadirachta," or "*Neem.*" The garden Neem; "our Melia sempervirens," I take to be the one here meant. The wood is worthless, except for cabinet-work, for which it is fitted by its colour and grain, and at another place he says, that "Melia bukaen," "*Bukkun,*" differs from Melia azadirachta in several respects. I have seen it only in the upper country. Though very similar to the last in leaf and general appearance, the smoothness of the bark and smaller size of the fruit at once indicate a distinction. The tree is found only about cultivated holdings. The wood is very strong and valuable for beams, roof-dunnage for terraces, and many other purposes. It has also the useful property of shooting from the root when once cut down with as much vigour as teak does. It is a tree deserving of extensive increase." I am unable to reconcile these remarks. Dr. Gibson took with him a copy of the second edition of this work across to America and noted and commented on it. He considers that M. bukayun, *Royle*, is not M. sempervirens.—*Roxb., II*, 395, *Voigt, Dr. O'Shaughnessy, pp.* 243, 244, *Genl. Med. Top., p.* 193, *Dr. Gibson.*

MELICOCCA TRIJUGA, *McClelland.*

Kobin BURM.

A most valuable timber, employed by the natives of Burmah for cart-wheels, oil-mills, and other purposes requiring great strength and solidity. It is found in greatest perfection on the banks of the Sitang in the Kareen forests above Tounghoo; but it is also found throughout the Pegu and Tounghoo forests in abundance, more particularly the latter. It is also found along with teak in Tharawaddy and Prome forests. It is a large tree, everywhere procurable, in the Southern forests of Pegu, affording a strong tough wood, of which the Burmese make their excellent solid cart-wheels. Light brown wood.—*Dr. Mc Clelland, No. IX, Govt. of India Report, p* 2, *Cal. Cat. Ex.* 1862.

MELICOCCA TRIJUGA??

Gyoo Tha. BURM.

Under these names, there was sent to the London Exhibition of 1862, the timber of a tree of Moulmein. The wood of which is used for bows, being tough and elastic.—*Cal. Cat. Ex.* 1862. (*Note.*—Is Gyoo Tha identical with Kobin?)

MELICYTUS RAMIFLORUS, the "Myhoo" tree of New Zealand, grows to the elevation of 25 to 30 feet, but is of small circumference. Its wood is heavy and only used for obtaining fire by friction.—*Bennett's Gatherings.*

MELIUSA VELUTINA, *H. f. & Thom.*

Tha-boot-kyee. BURM.

This tree grows all over the plains of British Burmah. Its wood is used for the poles of carts and harrows, yokes, spear-shafts, oars, &c., &c. A cubic foot of it weighs lbs. 42. In a full-grown tree on good soil the average length of the trunk to the first branch is 15 feet, and average girth measured at 6 feet from the ground is 5 feet.—*Dr. Brandis, Cal. Cat. Ex.* 1862.

MEMECYLON, a genus of plants of South-eastern Asia, shrubs or small trees, M. cuneatum, is a small tree of the central province of Ceylon at an elevation of 3,000 feet. M. ellipticum, also a small tree between Galle and Ratnapoora. M. Gardneri and M. leucanthum, grow at heights of 2,000 to 5,000 feet in the central province. M. orbiculare and M. ovoideum, in Ambagamowa : M. orbiculare at Hiniduon Córle. M. parviflorum, in the central province at 7,000 feet, and M. rhinophyllum and M. rostratum at 3,000, and M. sylvaticum, is common in forests at an elevation of 4,000 feet. M. capitellatum, *Linn.*, the Welli kaha of Ceylon ; and M. umbellatum, *Burm.*, the Kora-kaha of Ceylon, are mentioned by Mr. Fergusson as having blue flowers. They have a small wood but very tough, and used by bullock-drivers as switches.—*Thw. En. Pl. Zeyl., Fergusson.*

MEMECYLON TINCTORIUM, *Kön.* ; *W. & A.* ; *Prod.*, *p.* 319, *W. Ic.*

Memecylon ramiflorum, *Lan.*

Anjuna. MAHR.
Kurpa. "

Surpa? MAHR.
Allee. TEL.

Voigt indicates this as a shrub of Sylhet, the western ghats, and Coromandel Coast. But Dr. Gibson gives two notices of woods under this botanical name. Writing from Canara and Sunda, he says, Memecylon tinctorium ; Surpa, *Mahr.*, Iron-wood of two species. On the upper head of the ghats, wood very tough and strong for cart axles, &c. The beautiful flowers extensively used as a dye. Writing of the forests generally, he says, Memecylon tinctorium, "Kurpa," "Anjunn." A tree of rather a small size : common on the ghats above ; not seen elsewhere Wood is very strong and tough. Does not yield readily to wet when procurable of sufficient size, is much employed for agricultural implements, cart-furnishing, &c.—*Voigt, Gibson.*

MENG-BA, BURM., or MING-BA, BURM. In Amherst, a timber used for house-posts and rafters. The wood looks like a kind of saul, and would answer all the purposes of that wood.

MERESINGHA, URIA. In Ganjam and Goomsur, a tree of extreme height 30 feet, circumference 2½ feet, and height from the ground to the intersection of the first branch, 8 feet. It is tolerably common, and burnt for firewood. The leaves are used in curry-stuff.—*Captain Macdonald.*

MERISTA LÆVIGATA, the "Tafiri" tree of New Zealand, grows to a height of 16 to 20 feet, straight with light green foliage. Its wood has a close-grain, is hard, heavy and durable, but owing to its small circumference, it is useful only for poles.—*Bennett's Gatherings, page* 416.

MESUA, *Species.* Pynaroo? *Tam.?* According to Dr. Gibson, is the Malabar name of a species of Mesua. The Pynaroo gives one of the finest woods he had seen.—*Dr. Gibson.*

MESUA, *Species.* Mr. McIvor sent to the Madras Exhibition of 1855, a wood from the Nelambore jungles, which he named Mesua and Irool : common, much used by the natives for building purposes : durable and not liable to be attacked by insects.—*Mr. McIvor in M. E. J. R.*

MESUA COROMANDELINA, *W. Ic.* A tree of the forests between Galle and Ratnapoora, at no great elevation ; wood not known. —*Thw. En. Pl. Zeyl.*

MESUA FERREA, *Linn.* ; *DC.*

Mesua nagaha, *Gard.*
Arbor naghas, *Burm.*

Nagassarium, *Rumph.*

Nag-keshur. BENG.
Gungau. BURM.
Ironwood tree of Ceylon. ENG.
Nagkesar. HIND.
Belútta-champagam. MALEAL.

Nag Champa. MAHR.
Kesaramu Naga sara. SANS.
Kinjalkamu SANS.
Na-gaha. SINGH.
Chikati manu? TEL.
Naga kesara chettu. TEL.
Suvarnam. "

This tree grows in Ceylon, in peninsular and northern India, in Burmah, Tenasserim and Java. Sir William Jones says that this tree is one of the most delightful on earth ; and that the delicious odour of its blossoms justly gives them a place in the quiver of Camadeva, the hindu god of love. It is found chiefly in gardens in Bengal, where it flowers in the beginning of the warm season. and it is cultivated in gardens at Jeypoor. Dr. Gibson had not seen it in Bombay forests, but much about villages and brahmins' gardens in the southern parts of the Bombay presidency. It is cultivated in Pegu on account of the beauty and fragrance of its flowers, but is wild in Tenasserim. In the Bombay presidency the tree never reaches any great diameter, but the wood is very strong and tough. In Pegu, in a full-grown tree on good soil, the average length of the trunk to the first branch is 20 feet, and average girth measured at 6 feet from the ground is 5 feet. A cubic foot weighs lbs. 60. The

CSL

wood is hard, red and heavy, said to be used for furniture. The dried anthers are fragrant; the flowers and leaves are used in Bengal as antidotes to snake-poison.—*Ains. Mat. Med.*, 1813, *p.* 163, *Gen. Med. Top.*, *p.* 199, *Drs. O'Shaughnessy*, *p.* 230, *Gibson*, *Brandis and Mason*, *Cal. Cat. Ex. of* 1862, *Thw. En. Pl. Zeyl.*

MESUA SPECIOSA, *Chois.*

Diya-na-gaha. SINGH.

Grows near water in the south of Ceylon, and yields a useful timber.—*Mr. Fergusson.*

METROSIDEROS (from μήτρυ, the heart of a tree, and σίδηρος, iron), a genus of plants belonging to the natural order *Myrtaceæ*, so named because of the hardness of their inner woods; *M. lucida*, a beautiful tree, occurs as far south as Lord Auckland's Islands, in lat. 50½ south. *M. polymorpha*, is a tree of the Sandwich Islands, and is said to be that from which are made the clubs and other weapons employed in warfare by the South Sea Islanders, and M. verus, of China? Java and Amboyna, a small tree with white flowers is said to furnish the iron wood of China. It grows among rocks. The Chinese and Japanese value its wood for making rudders, anchors, &c., for their ships and boats. The bark is used in Japan as a remedy in mucous discharges, diarrhœa and dysentery. It is usually mixed with some aromatic, as Penang cloves, or nutmeg.—*Roxb.* ii, 477, *Eng. Cyc.*, *Voigt.*

METROSIDEROS ROBUSTA of New Zealand, is the Pohu-tukawa of the natives, and by Europeans the New Zealand Oak and New Zealand Fire tree. It is very irregular and crooked in its growth, but it attains a height of 60 or 70 feet, and a circumference of 10 to 14 feet. The timber is hard, durable, and used for the knees of ships. Its leaves, before falling, change to a bright scarlet.—*Bennett's Gatherings.*

METROXYLON SAGO.

Sagus Konigii.	Rambaya. MALAY.

Is cultivated in the Eastern Archipelago, to obtain sago from its wood.—*Seeman.*

MEZZALE, BURM. A tree of Amherst, Tavoy and Mergui, of maximum girth 4 cubits and maximum length 30 feet. Found scattered, not very abundant all over the provinces. When seasoned it floats in water. It is used by the Burmese for rulers, mallets and walking sticks; is of very handsome streaked grain-like palmyra wood, but not sufficiently durable to be recommended for ordnance purposes.—*Captain Dance.*

MIAUP-BOUT. Used for furniture, &c.

MICHELIA: a genus of plants of the order Magnoliaceæ, some of which furnish useful woods. Further information is required regarding M. Niligirica, *Zenker*, M. aurantiaca, *Wall.*, a tree of Pegu: M. kisopa, *Buch.*, a tree of the forests of Nepaul, and M. oblonga, a tree of the Khassya hills.—*Voigt.*

MICHELIA CHAMPACA, *Linn.*

Champaka.	BENG. SANS.	Champakamu.	TEL.
Champa.	,,	Champeyamu	,,
Sampaghy.	CAN.	Gand'hu p'hali.	,, ?
Chumpa.	DUK.	Hemangamu.	,,
Bongas jampacca.	MALAY.	Heman push pakamu.	TEL.
Champakam.	MALEAL.	Kanchanamu.	TEL.
Schampakam.	,,	Konchona?	URIA.
Sappoo.	SINGH.	Fruit.	
Shembugha maram.	TAM.	Chamakri.	HIND.
Sampenga chettu.	TEL.	Chamote.	,,

A tree of the Moluccas, of Java, of most parts of India and Ceylon, which flowers and fruits mostly throughout the year. It, or a species with similar qualities of wood grows in the N. W. Himalaya and in the Panjab up to elevations of 2,000 to 3,000 feet, and 60 or 70 feet high with 7 or 8 feet of girth. In the Panjab it is prized for well-work, for verandah posts and furniture. In Ceylon it is used for carriages, palanquins and in buildings. Captain Puckle says, it makes very handsome furniture, being beautifully mottled and polishes well, grows to a very large size, and has a yellow sweet scented flower.—*Roxb.* ii, 656, *Voigt*, *Mr. Mendis*, *Captain Macdonald*, *Captain Puckle*, *Dr. J. L. Stewart.*

MICHELIA DOLTSOPA, *Buch.* A tree of the forests of Nepaul, wood fragrant, excellent, used in Nepaul for house-building.—*Voigt.*

MICHELIA EXCELSA, *Wall.* A tree of Nepaul, yields valuable timber of a fine texture, at first greenish but soon changing into pale-yellow.—*Voigt*, 12.

MICHELIA NILAGIRICA, *W. Ic. Zenk.*

Pila Champa.	HIND.	Wal-sa-pu.	SINGH.
Pila Champa.	MAHR.	Shembugha maram.	TAM.

This large forest tree grows in the central province of Ceylon up to elevations of 3,000 to 8,000 feet. It is rare in the Walliar forests, being alpine in its tendencies, and is common on the Neilgherries, but Dr. Gibson had not seen it wild in the Bombay forests, though in gardens and about dwellings, it is common. Dr. Wight tells us, its wood is said to be good as regards strength, but too highly hygrometrical to be useful in other form than rafters or beams, though close and fine-grained; and Dr. Gibson mentions that the wood is straight, and moderately close in grain, that it could be turned to account in house-building, and might with advantage be creosoted, but it is not sufficiently common to be extensively used. According to Mr. Fergusson, trees are seen in Ceylon with 3 feet of girth. The wood is strong, elastic, and is used there for carriage shafts.—*Voigt*, 13, *Thw.*, *Drs. Wight and Gibson*, *Mr. Fergusson.*

MICHELIA RHEEDII, *Wight.*

Sampaghy. CAN.
Siapangam. MALEAL.
Sampanghy maram. TAM.
Sampangam. TAM.

A large tree of Mysore, the wood is close-grained and very handsomely marked in a mottled manner. At the Madras Exhibition of 1855 a remarkably large specimen was exhibited by Captain Cunningham, its dimensions were 11½ feet in length, 4½ feet in breadth and 3 inches in thickness, and was apparently derived from a tree of very great age.—*Dr. Cleghorn in Jur. Rep., Mad. Cat. Ex. of* 1862, *Captain Puckle.* (*Note*—Major Beddome considers M. Rheedii identical with M. Nilagirica.)

MILLELE. A wood of Ceylon, probably specifically identical with Sapoomilile, with which it coincides in every respect.—*Edye, Timbers of Ceylon.*

MILLINGTONIA. M. pinnata grows in Silhet, and M. pungens in the Neilgherries.

MILLINGTONIA, *Species*,

Ramenoia delle. SINGH.

A tree of the western province of Ceylon, the wood of which weighs lbs. 48 to the cubic foot, and is esteemed to last 20 years. It is used in common house-buildings. The sticks make excellent fences.—*Mr. Mendis.*

MILLINGTONIA HORTENSIS, *Linn. fil.*

Bignonia suberosa, *Roxb.*
Cork tree. ENG.

One of the Bignoniaceæ; it is an elegant tree growing to the height of fifty feet, is in blossom towards the close of the rains, and the seeds ripen in March. It grows in India and Burmah and is cultivated for ornament and for shade in avenues all over the South of India and Ceylon. The bark is of a soft spongy nature with a resemblance to cork; the wood is white, firm and close-grained.—*Thw., Dr. Riddell. See* BIGNONIA SUBEROSA.

MILLINGTONIA SIMPLICIFOLIA, *Roxb*

This tree grows in Madura, Nepaul, the Khassya hills, and is found in the forests of the Pegu valley, but scarce. Its timber is valuable from its weight and strength. It is of a white colour and adapted for every purpose of house-building.—*Roxb.* i, 103, *Voigt, Dr. McClelland.*

MILIUSA VELUTINA, *H. f. et T.*

Uvaria villosa, *Roxb.*
Pedda chilka duduga. TEL.

A tree of the Godavery forests, with a strong yellow wood, which does not warp, crickets are made of it, and it is used in house-building.—*Major Beddome.*

MILIUSA HOOKERIANA, *Beddome.*

A small tree of the Denkencottah hills in the Salem District with a strong wood.—*Major Beddome.*

MILULU, the Malayala name of a Malabar and Canara tree that grows to about sixteen feet high, and ten inches in diameter. It is known as one of the jungle woods, and is used by the native carpenters for boats, knees and timbers, on account of its strength.—*Edye, Forests of Malabar and Canara.*

MIMUSOPS, *Species.*

Thubbæ. BURM.

A Tavoy wood used in ship-building.

MIMUSOPS ELENGI, *Linn.; Roxb.;*

Bakula. BENG. HIND. SANS.
Kya-ya. BURM.
Mugali mara. CAN.
Minjulu?
Taindu. DUK.
Mulsari. ,,
Bholsari. ,,
Ape-faced flower Tree. ENG
Bakul. DUK. MAHR.
Elengi. MALEAL.
Malsuri of Panjab.
Moone Mal-gass. SINGH.
Moona mal. ,,
Maghudam maram. TAM.
Macharla maram. TAM. of Ceylon.
Mayugadi maram. TAM.
Pogada manu. TEL.

This tree grows in Ceylon, throughout the peninsula, the North and N. W. of India, the Panjab, Burmah, Pegu, Tenasserim and the Moluccas. Dr. Gibson says that, in the Bombay forests, it is mostly found as a cultivated tree, more rarely wild, and then only below the ghats. It is an ornamental tree with dark-green oblong alternate leaves, and white fragrant flowers; of moderate size, and often cultivated for the oil obtained from its fragrant flowers. This tree is very ornamental in compounds. Its small white sweet smelling flowers are celebrated in the Puranas and even placed amongst the flowers of the hindu paradise. In Canara and Sunda in the high jungles close above the ghats, it reaches a great size. It thrives well at Ajmeer, growing to a large size, the fresh flowers are delightfully fragrant, the wood is very hard and durable, and the folinge is beautiful and evergreen. The berries are eaten sometimes by the poor. In Burmah it is a rare ornamental tree, much valued by Burmese ladies, for its small delicate sweet-scented blossoms, which they string in chaplets for the head. In Canara, it yields wood serviceable for houses, but not used in ships or boats. At Moulmein, it is a strong wood for any ordinary purpose. Dr. Gibson had used the wood for cart shafts, and found it strong, and rather durable. In Ceylon, it is used for house-building and furniture. A cubic foot weighs lbs. 61, and it is esteemed to last 50 years.—*Roxb.* iii, 236, *Drs. Wight, Gibson, Mason and Stewart, Voigt, Cal. Cat. Ex.* 1862, *Madras Ex. Jur Reports, Mr. R. Brown, Ains. Mat. Med., p.* 158, *Gen. Med. Top., p.* 190, *Messrs. Mendis and Fergusson.*

MIMUSOPS HEXANDRUS, *Roxb.; W. Ic.*

Kirni. DUK. MAHR.
Rajun. HIND.
Chiri. SANS.
Paloo. SINGH.
Pallé. TAM.
Pala. TAM. TEL.
Pattai. ,,
Pedda pala. ,,

The fruit.

Keerni ka phal. Duk.
Cheerie. Sans.
Palay pallam. Tam.
Pala pundoo. Tel.

This tree grows in the eastern province of Ceylon ? it is common in the Deccan, where it is generally planted by Mahomedans ; it grows near the Godavery, and it is common in Guzerat, where it reaches a great size, but is seldom found in other of the Bombay forests. The wood is rather strong, and much used for sugar mill beams and well-frames in Guzerat, but Dr. Gibson had not seen it used elsewhere. Captain Beddome tells us that the wood is much used where strength and toughness are required. It is hard, a cubic foot weighs lbs. 60, and it is said to last 10 to 70 years. It is used for rulers, knobs, handles of tools, such as chisels, &c., and other articles of turnery ; and, in Ceylon, for oil presses, bridges and buildings. The berries are eaten when ripe, are nutritious and palatable.—*Roxb.*, ii, 238, *Ainslie, p.* 229, *Drs. Riddell and Gibson, M. E. J. R.*, *Mr. Mendis, Captain Beddome, Voigt.*

MIMUSOPS INDICA, *A. D.C. ; W. Ic.*

Iron wood of Ceylon. Eng.
Paloo-gass. Singh.
Palava maram. Tam.
Pali maram of Ceylon.

This valuable tree grows very abundantly in the hot, drier parts of the island of Ceylon. The timber is extremely hard, and strong and very durable, and used for oil presses, bridges and buildings, and is next in value to Halmilile (Berrya ammonilla.) Dr. Cleghorn informs us that it grows in Tinnevelly, but its felling is restricted as it is in large demand by the Madras Ordnance Department for gun-stocks. Until recently it was not included among the reserved woods, and the tree accordingly was extensively cut for private purposes. Steps, however, have now been taken to prevent this wood being removed, and, in Tinnevelly, where the tree chiefly grows, the Collector has been requested to inform the subordinate revenue officers in his district, that all private cuttings of *Palava* is restricted.—*Thw. En. Pl. Zeyl.*, *III, p.* 175. *Report, Conservator of Forests,* 1859-60, *Mr. Fergusson.*

MIMUSOPS KAUKI, *Linn.*

M. dissectus, *Spreng.*
" hexandra, *Roxb.*
Achras dissecta, *Forst.*
Achras baluta, *Aubl.*, *Rh., Rumph.*

Kirni. Hind.
Manil kara. Maleal.

This middle-sized tree grows in Malabar, in Northern India, Panjab, the Malay islands, the Moluccas and New Holland. It is cultivated at Ajmeer and Kotah, where the tree becomes very large and is very handsome. In the Dekhan, it grows to a large size, and is generally planted in groves. The wood is fine-grained and hard. The fruit, which is about the size of a small olive, is of a yellow colour when ripe, after the rains, and contains a sweet clammy juice, eaten chiefly by the natives. In Burmah this dried fruit is occasionally seen among the Chinese, brought from Singapore. —*Roxb.*, ii, 238, *Voigt, Drs. Irvine, p.* 190, *Riddell and Mason, Mr. Powell.*

MINJHAREE or Paloodhona, Uria. A tree abundant in Ganjam and Goomsur, extreme height 45 feet, circumference 5 feet, and height from the ground to the intersection of the first branch, 6 feet. Used on account of its lightness for rafts, also for pacottah poles. The fruit and flower are both eaten. The bark and leaves are used medicinally for worms.—*Captain Macdonald.*

MIRABAN. A Penang wood of a light red colour. Much used for ship-building, furniture, &c.

MIRZAPORE (Benares.) WOODS.

Dipterocarpus—Bigeedar.
Diospyros—Abnoos.
Conocarpus—Sickroa.
Pentaptera glabra—Asan.
Phyllanthus emblica—Amorah.
Terminalia bellerica—Ruherra.
Terminalia bellerica—Safed mooslue.
Terminalia bellerica—Hurrah.

MISCHODON ZEYLANICUS, *Thw.*

Taman. Tam.

A very handsome tree, having excellent timber, widely spread in the island of Ceylon. —*Mr. Fergusson.*

MITREPHORA HEYNEANA, *Blume.*

Orophea Heyneana, *H. f. et T.*

A middle-sized tree, growing at Haragam and other places on the lower Badulla road from Kandy, up to an elevation of 1,500 feet. —*Thw. En. Pl. Zeyl.*, *p.* 8.

MOCHEAL, the Tamil name of a Ceylon tree which is about twenty inches in diameter, and eight or ten feet high. It is used in native boats, &c. It produces a fruit from which oil is extracted.—*Edye on the Timber of Ceylon.*

MODDORO GOODEE, Uria. A tree of Ganjam and Goomsur, of extreme height 40 feet, circumference 2½ feet, and height from the ground to the intersection of the first branch, 8 feet. It is used for ploughshares and rafters and burnt for firewood, is not very common.—*Captain Macdonald.*

MOEE, Uria. Garuga pinnata. This tree of Ganjam and Goomsur, is of extreme height 30 feet, circumference 3 feet, and height from the ground to the intersection of the first branch, 13 feet. Stakes are cut from this tree and planted in hedges where they spring up again. The bark is used in tanning leather. The tree abounds.—*Captain Macdonald.*

MOKETAMMA-THA, Burm. Meaning Martaban wood. A tree of maximum girth

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1 cubit and maximum length 8 feet, found very abundant in Martaban and its adjacent jungles, also all over the provinces especially on the banks of rivers. When seasoned, sinks in water : uncommonly heavy. Stated to be used for the same purposes as chisel-handle tree, but still stronger.—*Captain Dance.*

MOMA-KHA ? BURM., OR MORNA-KHA ? BURM. In Amherst, a timber employed for gun-stocks ; it is a reddish, softish wood, close and compact, fit for turning purposes, and exempt from attacks of insects.

MONG-DAYAT NEE, BURM., OR RED MONG DAYAT. A tree of maximum girth 2 cubits, and maximum length 15 feet. Not abundant, but found on the sea shore from Amherst to Mergui and on the Callagouk islands. When seasoned, it floats in water. Used for crooks, and straight parts also of ships and boats : is a light tough wood with a good grain, but too liable to rot to be recommended.—*Captain Dance.*

MONG-DAYAT PEW, BURM., OR WHITE MONG-DAYAT. A tree of maximum girth 2½ cubits, and maximum length 22 feet. Scarce, but found all over the Tenasserim provinces near the sea and in the mouths of the rivers. When seasoned, it floats in water. It is not a good wood, being very perishable.—*Captain Dance.*

MONOCERA, a genus of plants, chiefly trees, of the Nat. Order Elæocarpaceæ, of which are known besides those below, M. tuberculata of Travancore and Neilgherries ; M. Griffithii of Mergui ; M. ferruginea of Neilgherries, and M. peliolata of Penang.—*Voigt*, 123.

MONOCERA ROXBURGHII, *Wight.*

Elæocarpus aristatus, *Roxb.*

A tree of the Khassya mountains.—*Roxb.* ii, 2,599, *Voigt*, 123.

MONOCERA RUGOSA, *Wight.*

Elæocarpus rugosus, *Roxb.*

A tree of Assam and Chittagong.—*Roxb.* ii, 599, *Voigt*, 122.

MONOCERA GLANDULIFERA, *Hooker.*

M. Munronii, *Wight.*

A tree of Coorg and the western forests, wood very strong.—*Major Beddome, Voigt*, 123.

MONOPORANDRA CORDIFOLIA *Thw.* A moderate-sized tree of Ambagamowa and Saffragam districts in Ceylon, at an elevation of about 3,000 feet. Wood unknown. —*Thw. En. Pl. Zeyl., I, p.* 39.

MONOPORANDRA ELEGANS, *Thw.* A moderate-sized tree of Saffragam district in Ceylon, at an elevation of about 2,000 feet. Wood unknown.—*Thw. En. Pl. Zeyl., I., p.* 39.

MONOPORANDRA LANCIFOLIA *Thw.* A small tree growing in Ceylon at Hellessee, in the Pasdoon Corlé, at no great elevation. Wood unknown.—*Thw. En. Pl. Zeyl., I., p.* 39.

MOOKERSEY ? TAM. In Tinnevelly, a wood of a red colour, used for building in general.—*Colonel Frith.*

MOLU VENGA, TAM. In Travancore, a wood of a copper colour, specific gravity 0·831. Used for common buildings.—*Colonel Frith.*

MOON-DIEN, BURM. This wood is fine grained, light, and recommended for furniture. Its breaking weight is lbs. 121. A cubic foot weighs lbs. 33 to 38. In a full-grown tree on good soil the average length of the trunk to the first branch is 50 feet, and average girth measured at six feet from the ground is 10 feet. It sells at 4 annas per cubic foot.—*Dr. Brandis, Cal. Cat. Ex. of* 1862.

MOORGAH, HIND. ? Of a light-brown colour, close-grained, and takes a good polish, but is not a strong or serviceable wood. Occurs in the Santhal jungles from Raneebahal to Hasdiha, but rather scarce. Native articles of furniture are principally made from this wood.—*Cal. Engineers' Journal, July* 1860.

MOORGUL MARA.

Garcinia purpurea, *Wild Mangosteen.*

Kokeem ? MAHR. | Kokum ? MAHR.

Under these names, Dr. Gibson describes a beautiful tree of Canara and Sunda, mostly below and near valleys. Valued for its fruit which is extensively exported as a native condiment. The concrete oil also is much used. Its wood is good.—*Dr. Gibson.*

MOOTSOMAH ? This is a very plentiful tree of Akyab. It furnishes a very small wood, used for firewood.—*Cal. Cat. Ex.* 1862.

MORELE, HIND. A tree of Chota Nagpore, furnishing a hard, white timber.—*Cal. Cat. Ex.* 1862.

MORINDA, a genus of trees, indigenous and largely cultivated in India, producing hard and very durable woods, and useful dyes. The bark and root, of *M. tinctoria*, and *M. citrifolia* in India, and of *M. exserta*, in Burmah, are employed to form a very valuable red dye, which is fixed with alum ; and Dr. Buchanan mentions that the root of M. ternifolia in Mysore, is used for similar purposes. Most of the red turbans of Madras are dyed with the root of the Noona. The Karens prepare their red dyes most usually from the roots of two or three species. The *M. citrifolia* is cultivated, by the Burmese for a dye, but the Karens more commonly use *Morinda exserta*, the indigenous species. These form a very

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valuable red dye which is fixed with alum: the colour, though not brilliant, is far more permanent than many other colours.

MORINDA BRACTEATA, *Roxb.*

Rouch.	Beng.	Yaiyoe ?	Burm.
Mhan bin ?	Burm.	Ahoo-gaha.	Singh.

A small tree, native of Ganjam, the Andamans, and of the Philippines and Moluccas in the Archipelago,—with large shining leaves. The tree is common throughout the province of Pegu. It is also cultivated about Phoungyee houses. Its wood, of a bright yellow colour, is found in the Bengal bazars under the name of *Rouch*, and is valuable as affording a bright yellow dye.—*Dr. McClelland, Mr. Robert Brown, Voigt, Mr. Fergusson.*

MORINDA CITRIFOLIA, *Linn.; Roxb.; W. & A.; Rheede.*

Togaree wood.	Anglo-Tel.	Manja pavattay	Tam.
Indian Mulberry ?	Eng.	Nonna maram.	,,
Al.	Hind. Mahr.	Nuna maram	,,
Ach.	,,	Toguru chettu.	Tel.
Ak.	,,	Mulugha.	,,
Barra-al.	Hind.	Mulugu chettu.	,,
Bartondie.	Mahr.	Maddi chettu.	,,
Kada pilva.	Maleal.		

This small tree is common in Kotah and Boondee. It grows all over the Madras Presidency, is much cultivated in that of Bombay, and grows in Pegu, Cochin-China and the Moluccas. It is not a common tree in the Bombay forests, but is more common about villages. The wood is of a deep-brownish yellow, and the roots are used in dyeing. The quality of the wood, judging simply from the appearance, is little, if at all, inferior, to Nauclea cordifolia, but the tree is much smaller. The wood is easily worked and used for common purposes. Mr. Rohde has seen trees of this wood nearly 2 feet in diameter. It makes tolerable planks, but appears never to be used on the Bombay side, except for door-shutters and such like. A scarlet colouring matter is procured from the roots and bark, and used for dyeing handkerchiefs, turbans, &c. It is used, also, to assist more expensive dyes in giving a red colour to yarn and cloth—the red thread used in carpet-making is entirely dyed with it. The process of dyeing red yarns in the Circars is well described by Heyne. The roots of the awal tree of Malabar and other parts of India, *Morinda citrifolia*, and of *M. tinctoria*, are found abundant in all the Asiatic islands, and are extensively used as a dye stuff for giving a red colour. The tree is usually grown as a prop and shade for the pepper vine and coffee tree. The colouring matter resides principally in the bark of the roots, which are long and slender, and the small pieces are the best, fetching 8s. to 10s. a maund. It is exported in large quantities from Malabar to Guzerat, and the northern parts of Hindostan, but seldom finds its way to Europe. The flowers have a very sweet scent and the tree would thrive well and be ornamental in compounds. In Coimbatore, Nonna maram, Tam., is the proper Tamul name for the *Morinda citrifolia*, but *Morinda umbellata*, a climbing plant, and hence unfit for use as a timber, has the same Tamul name.—*Voigt, Mr. Robert Brown, Drs. Wight, Gibson and Cleghorn, Gen. Med. Top., Mr. Rohde, Simmonds.*

MORINDA EXSERTA, *Roxb.*

Bun uch.	Beng.	Togari mogilli.	Tel. of the Godavery.
Mhan-bin. ?	Burm.	Mogilli.	Tel. of Circars.
Nya ?	,,		

A small tree of Ceylon, the Circars, of Bengal and Burmah. In Pegu, M. bracteata and this are both small trees, only found about Phoungyee houses, in a cultivated state. Wood yellow, hard and useful, is fit for fancy work, and does not warp.—*Voigt, Captain Beddome.*

MORINDA TINCTORIA, *Roxb.*

Al.	Beng. Hind.	Mulugu chettu.	Tel.
Ach.	,,	Luagru.	,,
Uchyuta.	Sans.	Togaru.	,,
Maddi chettu.	Tel.		

A small tree, supposed to be the same as M. citrifolia in its wild state. Its green fruit is pickled or is eaten in curries. It is pretty common in every part of India. It is in flower and fruit the greater part, if not the whole, of the year. It is largely cultivated at Boondee, Kotah and Mewar. The woods of all the species are beautiful, hard and durable; and excellent for gun-stocks. That of this species possesses all these qualities, is variegated red and white, and is employed for gun-stocks in preference to all other kinds. The bark of the roots is used to dye red, the colour is fixed with alum, but it is neither bright nor durable. In some parts of India, it is cultivated for the sake of the roots. In the Circars the dyers use the bark of the fresh roots, bruised and gently boiled in water for a short time. The cloth or yarn is prepared in a cold infusion of the powdered gall of Terminalia chebula, in milk and water: it is then dried and moistened with alum water, and again dried, and receives from the above decoction, a pretty, bright, but fugitive red. Dr. Irvine says the root is extensively exported from Ajmeer as a red dye. The plant is not allowed to shoot up into the bush, but is dug up the third year after planting. The flowers are very fragrant.—*Roxb., Med. Top. of Ajmeer, p. 182, Voigt, Mr. Robert Brown.*

MORINDA TOMENTOSA, *Heyne.*

Morinda mudia.	*Hom.*	Manjinatte.	Maleal.

This tree grows to 20 or 30 feet high in Travancore. It is very common there, and is frequently found in gardens as well as in the forests. It yields a yellow timber which takes a polish equal to jackwood, and the interior wood of old trees yields a dye.—*Drury's Useful Plants*, p. 308.

MORRE, SINGH. Eye ball. Eng of Ceylon. A tree of the central province of Ceylon. A cubic foot of its wood weighs 62 lbs., and it is said to last 25 years. It is used for common house-building, and, next to Galmorre, Nephelium, furnishes the best firewood for lime and brick kilns. Berries eaten when ripe.—*Mr. Mendis.*

MORUS. Several species of mulberry, M. alba, *L.;* M. Cashmeriana, *Royle ;* M. indica, *Roxb.;* M. lævigata, *Wall.;* M. tatarica, *Willd.*, grow in the Panjab, Kashmir, on the Salt Range, the Chenab up to 5,000 and 7,000 feet, in Thibet at 9,000 feet and abundantly in Affghanistan, and the trees have a girth of 12 to 16 feet. The wood of old trees is strong and useful and much employed for construction and implements. The mulberry is largely used in Affghanistan.—*Dr. J. L. Stewart, p.* 217.

MORUS ALBA AND M. LÆVIGATA. MULBERRY.

Tút. HIND.

Grows both in the hills and plains of India.

MORUS MULTICAULIS AND M. SINENSIS, are grown in the Panjab for rearing the silk worm, and M. parviflora, *Royle*, grows in the Panjab Himalaya at from 2,500 to 9,000 feet with a girth of 10 to 28 feet. Its wood is yellow and strong, but is liable to be attacked with worms. It is used for ploughs, toys, troughs, &c.—*Dr. J. L. Stewart, p.* 29.

MORUS PARVIFOLIA.

Karan. HIND. | Tút, or tútri. HIND.

The wood of all old mulberry trees is hard and highly esteemed for furniture, parts of boats, &c. This grows in the hills at elevations varying from 4,000 to 7,000 feet. The leaves form a valuable fodder for cattle. —*Dr. Cleghorn, Mr. Powell.*

MORUS SERRATA. HILL MULBERRY.

Tut or krún. HIND. | Kimu. HIND.

A tree of fast growth, attaining its full size in 20 years, when it becomes useful. Length of trunk to first branch 8 feet, (some say 15 feet), and girth 5 feet. There are several species of Morus, of which that called the "krún," growing in the hills, is the best ; but the quality of its timber depends a great deal upon the locality in which it is grown ; the timber of trees in the higher altitudes is good, that in the valleys is not valuable. The wood is yellow, tough, but liable to bend, and is readily attacked by worms. It is used by zemindars for ordinary house-building, and for ploughs ; it is also used for legs and posts of cots, troughs and toys. It bears a sweet edible fruit. The tree is not found in forests, but here and there on zemindars' estates.—*Lieut. Col. Lake.*

MORUS SINENSIS.

Chin-ki-tut. HIND.

Imported from China, and yields the best food for silk worms.—*Mr. Powell.*

MOULMEIN TIMBERS AND FANCY WOODS. Of the following timbers, forwarded to the Exhibition of 1851, from Moulmein, by J. R. Colvin, Esquire, Commissioner of the Province in 1847, under their native names, several were afterwards identified by Dr. Falconer, during his visit to the Teak forest of the Tenasserim provinces in 1848-49 :—

Careya sphœrica, Bamboœ, BURM.

Cyrtophyllum fragrans, Anan, BURM., one of the Nux vomica tribe ; one of the hardest, most compact, and heaviest woods known.

Hopea odorata, Thengan, BURM., of the Dipterocarpeæ or saul tribe ; a very strong but coarse-grained timber.

Indike, BURM., Ebony.

Inga xylocarpa, Pyangadeau, BURM. The Ironwood of the Arracan provinces, very hard, dense and durable.

Lagerstrœmia macrocarpa, pyen-ma, BURM., commonly known under the name of jarrool.

Pterocarpus Indica, Padauk, BURM., one of the Leguminosæ, called Rosewood. It is a very beautiful and hard compact timber, closely resembling the Andaman wood.

Pyen-ma and Kazaret, BURM., undetermined,

The following 114 woods were sent from Moulmein to the London Exhibition of 1862 :

(1) Acacia, Konk Koe, this wood is made into boats, carts and other ordinary house-building material.

Acacia serissa, Tseek Tha, wood reddish colour, used for furniture.

Ahline Ngai, used for ordinary house-building purposes ; leaf is eaten boiled as greens.

Ah See Eha, wood hard, used for making musical instruments.

Arborea ? ? Bun-boay, a strong durable wood ; used for house-posts.

Abrus? Youg Tha Ngai, used in ordinary building materials.

Artocarpus echinatus, Toun Phain, used for making boats and carts.

Artocarpus echinatus, Toung Pain Nai, fruit edible, used in house-building.

Artocarpus integrifolius, Pain Nai, BURM. "Jack tree," Fruit eaten, wood yellow, used to dye the yellow Pongyee (Burmese Priest) cloths.

(10) Bamboo, species. Dedoap Tha, this wood is made use of for ordinary house-building purposes.

Bignonia, Thau Thet Ngai, used in common purposes of building.

Bignonia stipulata, Ma-shoay, a strong wood for any ordinary purpose. Fruit edible.

Bombax ? That Pan ? a strong wood for any ordinary purpose.

Bon Sone, the fruit is edible. Used for house-building purposes.

Cassia, species. Ngoo Tha, made into house-posts. Fruit and bark used medicinally.

Cassia Sumatrana ? Kyoo, this wood is used in ordinary house-building.

Cassia Sumatrana, Mezalee, this wood is used in ordinary house-building.

Castanea martabanica, Thit Nya, the fruit eaten exactly like chesnuts.

Co[illegible] myxa, Koan Tha Nath, this wood is used in ordinary house-building. The leaf is made into cigar wrappers.

(20) Dalbergia, species. Myouk Shaw, this wood is used in ordinary house-building.

Dalbergia, species. Water Dalbergia, Thap-ya, this wood is used in ordinary house-building.

Dalbergia, species. Youdine, a hard, heavy black wood, used for furniture.

Dalbergia alatus. Tsouk Yoa, used for tool handles.

Dalbergia ooata, Tsouk Yo, a tough wood, much used for tool handles.

Dillenia, species, Zin Pyun Ngan, a strong wood for any ordinary purpose. Fruit edible.

Dipterocarpus grandis, Tngtha, converted into planks for building.

Ein Gyin, one of the Dipterocarpeæ, a very strong durable wood, as strong as Pyengado; when kept long in water it is said to become petrified.

Ein Win, used for all ordinary purposes of building.

Eugenia, species. Sha Bya Gyin, wood soft, used in ordinary purposes of building material.

(30) Eugenia, species. Sha Bya. a strong wood for any ordinary purposes.

Fagræa fragrans, Ah Nan, a strong wood, good for building purposes.

Ficus cordifolia, Nga Thin-gyee, a strong wood for any ordinary purpose.

Galex, species. Mohmagah, used in common purposes of building.

Garana speciosa, Balawa, used in common purposes of house-building.

Garcinia, species. Young Zalai, this wood is made use of for ordinary house-building purposes; fruit edible.

Gardenia floribunda, Thet Ya, this wood is made use of for ordinary house-building purposes.

Gardenia coronaria, Yin-gat, used for building purposes. Fruit edible.

Gmelina arborea, Yamana, used as an ordinary building material.

Goay-pin-gyee, used in common purposes of house-building, and also its seed as weights, in weighing gold.

(40) Goay Tha, used in common purposes of house-building.

Grewia, species? Bha Woon, converted into planks for building.

Grewia, species, Tha-ran, a wood used to make dancing dolls.

Grewia floribunda, Mya-ya-gyee, into any common house-building material.

Gordonia, Anan Pho, a strong wood, good for building purposes.

Homalium tomentosum, Mouk Kyan, a strong wood for any ordinary purpose.

Hopea odorota, Thin Gan, a very strong, durable wood; used for making canoes.

Inga species, Bom Mai Za, wood hard, used for making musical instruments.

Inga xylocarpa, Pyen-ka-doe, wood extremely hard; used for house-posts.

Ka Nat Tha, this wood is made use of for ordinary house-building purposes.

(50) Kay Yoob, used in ordinary building materials.

Khan Tha, this wood is made into any house-building material.

Koun Soay-dan, this wood is used in ordinary house-building.

Kya Nan, red wood, used generally by carpenters.

Kyan pho, a strong wood, good for building purposes.

Kya zo, used for building material.

Lagerstrœmia, species. Jarool, Pyen-ma-zoat-gyee. wood soft, used in ordinary purpose of building material.

Lagerstrœmia reginæ, Pyen Ma Nee. the Jarul of Chittagong, wood used for boats and carts, also for flooring houses.

Lagerstrœmia, Pyen Ma Phoo, used for making oars and for rough house-building.

Mai Kin, used in ordinary building materials. Fruit used as medicine.

(60) Ma-nee Auka, used for ordinary house-building purposes. Bark is used medicinally.

Mangifera Indica. Tha Yat, That Yat, this wood is used in ordinary house-building. Fruit edible.

Mangifera oppositifolia, Mayan, used for building purposes.

Mellicocca trijuga, Gyoo Tha, this wood is used for bows, being tough and elastic.

Mimusops elengi, Kya Ya, a strong wood for any ordinary purpose. The flower is used medicinally and prized for its fragrance.

Moringa pterygosperma? Dha-ne Tha? used for building purposes.

Moringa pterygosperma? Dain Tha, flowers, bark and root used medicinally. Wood made into dolls.

Mya Ya Ngai, this wood is used for ordinary house-building purposes.

Myouk Ngo, Moulmein Lancewood, this wood is made into any house-building material.

Nat Gyee, used for posts and knife handles.

(70) Nauclea cadamba, Ma-oo-tha, used for building purposes.

Nux vomica tree, Kha Gyee, used for all ordinary purposes of building. Fruit used medicinally.

Nux vomica tree, Ka-boung, used in ordinary building materials. Fruit used as medicine.

Nyoay Sha, used for building material.

Nyoung Tha, a strong wood for any ordinary purpose.

Nyoung Lan, used for building material.

Oan Naih, the fruit is edible. Used for house-building purposes.

Oak An, this wood is made into canoes.

Odina wodier, Na Bai, a red wood. Bark used medicinally.

Ouk Kyi-ne, this wood is used in ordinary house-building.

(80) Paran Tha, wood soft, used in ordinary purposes of building material.

Phat Than, used for chisel handles.

Phyllanthus emblica, Yee Pye, used in common purposes of house-building.

Pierardia sapida, Ka Na Oo, a very hard wood: used for wheel axles.

Pollypod, Oak-leaved; *Zangyecoat-doup*, used for all ordinary purposes of building.

Pterocarpus dalbergioides, Padouk, a very strong wood, admirable for furniture, used by the Burmese to make their musical instruments.

Pune Tha, wood soft, used in ordinary purposes of building material.

Red jambo, Tha Bya Nee, used for building material.

Setphan, used in common purposes of house-building.

Sonneratia acida, La Moo, an inferior wood for boats, which lasts but two or three years. The fruit is an article of food.

(90) Sonneratia assetata? (qu. acida?) Kama-la, an inferior wood for boats, which lasts but two or three years.

Terminalia bellerica, Phangah, is very hard and heavy. Used to make rice-pounders, furniture, &c.

Tha Khoot, this wood is used in ordinary house-building.

Tha-man-tha, used in ordinary building materials.

Than-that-gyee, used for building materials.

Thet Kon Nyen, this wood is used in ordinary house-building.

Thet Lendah, used for all ordinary purposes of building.

Thin-win, used for house-building purposes. The fruit is edible. The root used medicinally.

Thit Nee, converted into boxes, tables, &c., &c.

Toung Ma Yoa, wood smooth; used generally for Burmese slate or writing boards.

(100) Tsan-saypen, used for ordinary house-building purposes. Leaf is eaten boiled as greens.

Tsat Tha, used for building purposes.

Vatica, species, Koung Mhoo, used for making carts and boats.

Vitex arborea, Touk-sha-gyee, fruit eaten, the wood is used for any common purpose.

Vitex arborea, Tonk Tsa, a strong wood for any ordinary purpose.

Wiha Oung, used for all ordinary purposes of building.

Woot Tha, a strong wood for any ordinary purpose.

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X[illegible]pus echinatus, Ah Nan, a very strong wood, used for making gun stocks and scabbards.

Ya Ka Ngine, this wood is used in ordinary house-building.

Yamanie, this wood is used in ordinary house-building.

(110) Ya Tha Nat, an inferior wood for boats, which lasts but two or three years. The fruit is an article of food.

Ya-tha-pya, the fruit is edible. Used for house-building purposes.

Yin Yo, a strong wood, good for building purposes.

Za Padrup, a strong wood, good for building purposes.

Zinpyun Gyee, this wood is used in ordinary house-building.

MOU-THA-MA. A tree in Amherst; with a fine-grained, compact, red wood, but liable to split; it would answer for hand-spikes. It resembles Myrtus pimenta. Bark used for blue dye.—*Captain Dance.*

MUDAMALLAI FORESTS. The Bangalore barracks, railway, Neilgherry barracks, jail, and other works were supplied with timber from these forests.—*Conservator's Report.*

MULMURACA, the Tamil name of a Ceylon tree which grows to about twenty-four inches in diameter, and twenty-five feet in height. It is used by the natives for canoes; catamarans, and many other purposes. It produces a fruit which, with the leaves of the tree, is used medicinally.—*Edye, on the Timber of Ceylon.*

MUNCHETTY MARAM, the Malayala name of a tree which grows in Malabar and Canara, to about twenty-five feet in height, and eighteen inches in diameter: it is used by the natives for coasting vessels and house-building: it is of little value.—*Edye, Forests of Malabar and Canara.*

MUNGEVENAH, the Tamil name of a Ceylon tree which grows to thirty inches in diameter, and eight feet long. It is close in its grain and light. It is used for gun-stocks, poles of palanquins, sandals, &c. It produces a fruit which is of little use. It is on the fruit of this tree that the monkeys, pea-fowl, &c., feed.—*Edye on the Timber of Ceylon.*

MUNJADDY, Tam. A Travancore wood of a purple colour, specific gravity 0·667. Used for building houses only.—*Col. Frith.*

MUNJET KERDDUM, Tam. A Tinnevelly wood of a light straw colour. Used for building in general.—*Col. Frith.* (*Note.*—Major Beddome says this is the Manje kadumba, the Nauclea cordifolia.)

MUNNY MARTHA, Tam. A Travancore wood of a brown colour, specific gravity 0·607; 1 to 6 feet in circumference; used for furniture.—*Colonel Frith.* (*Note.*—Major Beddome says this is a species of Terminalia.)

MUROODOO, Tam. A Palghat wood of a light colour. A small tree; used for buildings.—*Colonel Frith.* (*Note.*—Major Beddome says this is a species of Terminalia.)

MURRAYA, *Species.* Burman boxwood. The Karens sometimes furnished Mr. Mason with specimens of wood scarcely to be distinguished from the box wood of Europe. Dr. Wallich found *Nauclea cordifolia* on the banks of the Irrawaddy, which has "wood coloured like that of the box tree, but much lighter, and at the same time very close-grained." It may possibly be the same tree, although the Tenasserim wood is not light; or it may be a Tavoy tree, which he says has "a strong tough wood, in grain like box."—*Dr. Mason's Tenasserim.*

MURRAYA, *Species.* Maikay, Burm. In Tavoy, a tough close-grained wood, used for handles.—*Dr. Wallich.*

MURRAYA, Ash-leaved Murraya.

Etteiriye. Singh.

Under these names, Mr. Mendis notices a timber tree of the eastern province of Ceylon, a cubic foot of the wood weighs lbs. 60, and it is said to last from 10 to 70 years. It is used for handles of mamoties, hammers and bill-hooks; and rafters for cadjan roofs.—*Mr. Mendis.*

MURRAYA EXOTICA, *Linn.*

Murchola in Kumaon. | Ætteriya. Singh.

Mr. Fergusson describes this as a small tree, the toughest wood in Ceylon excepting those of Andara, "Dicrostachys cinerea," and of "Heritiera littoralis?" Mr. R. Thompson says that in Kumaon it is only a small scandent shrub.—*Mr. Fergusson, Mr. R. Thompson.* (*Note.*—It seems identical with Mr. Mendis' ash-leaved Murraya.)

MURRH NEEN, Burm. A tree of maximum girth 2 cubits, and maximum length 15 feet. Found abundant all over the Tenasserim provinces on low grounds. When seasoned it floats in water. It looks exactly like deal, but is stated to have no durability.—*Captain Dance.*

MURRAYA, *Species.* Maikay, Burm. A timber of Amherst, Tavoy and Mergui, maximum girth 1 cubit, and maximum length 15 feet. Abundant inland in Tavoy, but scarce near Moulmein. When seasoned it floats in water. It is too scarce for helves, but recommended for handles of planes, chisels, hammers, &c. It is used by Burmese for handles of knives and other weapons, and is a strong, tough wood, in grain like Box-wood—(Vide Major Simpson's Report). It is recommended by the Ordnance carpenters as the very best wood, in the collection, for planes or for any purpose in lieu of box.—*Captain Dance.*

MUSSEE, CAN. One of the Lauraceæ grows in Mysore, where it is in general demand.—*Captain Puckle in Mad. Cat. Ex. of* 1862.

MUTHERIE. In Ceylon, the Tamil name of the satin-wood: called Buratu by the Portuguese. It is a handsome and valuable wood, and may be considered the most durable of any in Ceylon for general uses, provided it is seasoned in the shade: it may be converted into handsome furniture, &c. In consequence of its weight all trees are cut in lengths of from ten to twelve feet, for the purpose of getting it floated down the rivers from the forests, which is done in canoes. Mr. Edye was of opinion that it may be obtained from twenty-five to forty feet long, but the largest diameter is thirty-six to forty inches. That which is in general brought to the dock-yard is about fifteen feet long and from eighteen to twenty-four inches in diameter, being cut to that size for the ease of conveyance.—*Edye on the Timber of Ceylon.*

MUTTALLA, TAM. A Travancore wood of a brown colour. Used for light work.—*Colonel Frith.*

MYA-KA-MAUN, BURM.? A Tavoy wood; valuable, strong and black, used for knife handles.—*Wallich.*

MYAUN-NGO, BURM.? In Amherst, white sissoo; used for rafters.—*Cat. Ex.* 1851.

MYAUP-LOAUT, BURM.? In Amherst, a timber tree, a kind of superior Toon wood, supposed of the genus Cedrela.—*Cat. Ex.* 1851.

MYA-YA, BURM. In Amherst, a hard and close-grained wood, used for rafters; it is strong and durable, and would answer for beams, &c., being exempt from the attacks of insects.—*Cal. Cat. Ex.* 1851.

MYA-YA-NGAI, BURM.? A tree of Moulmein, wood used for ordinary house-building purposes.—*Cal. Cat. Ex.* 1862

MYENG-TA-BEP, BURM.? A strong, bluish-grey Tavoy wood; adapted for handles.—*Dr. Wallich.*

MYHILENAH in Tamil, Mylelu in Malayala. This Malabar and Canara wood is of a greenish tinge, and very close-grained; it grows to about twelve or fifteen feet long, and two and a half feet in diameter. It produces a fruit like green-pepper; its leaves resemble the mango: the wood is generally considered strong and durable, and the native carpenters procure from its branches the small crooks used for the knees and timbers of boats, &c., and the large limbs for the frames of native vessels. The tree is scarce in the north part of Malabar and Canara, and not known in Ceylon.—*Edye, Forests of Malabar and Canara.* (*Note.*—Is this Colonel Frith's myle ellah?)

MYLE ELLA, TAM.? In Travancore, a wood of an ash-colour, used for carts, buildings, &c.—*Col. Frith.*

MYLE ELLAH, TAM.? In Travancore, a wood of a light green colour, specific gravity 0·896. Used only for building houses.—*Col. Frith.* (*Note.*—Is this Edye's Myhi-lenah.?)

MYOUK-NGO, BURM. Lancewood of Moulmein. A tree of Moulmein, wood is made into any house-building material.—*Cal. Cat. Ex.* 1862.

MYOPORUM TENUIFOLIUM, the Spurious Sandalwood tree of the Sandwich islands, attains the height of 15 to 20 feet, and is 3 to 4 feet in circumference. It grows in elevated situations. Its foliage is light-green, with small white flowers. Its wood varies in colour according to age, from light-yellow to red, and is used for making planes.—*Bennett's Gatherings, p.* 419.

MYRICA SAPIDA. Box MYRTLE.

Kaippal. HIND.

The wood in grain is very like birch, but of a darker colour. The tree is occasionally met with in the Panjab Hills from 4,000 to 6,000 feet, but the wood is not generally sold in the bazars. The ripe fruit is used for sherbets.—*Mr. Powell.*

MYRICARIA? *Sp.* (M. GERMANICA?)

Hombu of Kanáwar. | Bis of Kaghan.

A tree of the N. W. Himalaya.

MYRISTICA, *Species.*

Thounsanga. BURM.

In Tavoy, a large tree, used in boat-building.—*Dr. Wallich.*

MYRISTICA, *Species.*

Koathee. BURM. | Kunneen. BURM.

In Tavoy, a large tree, used in flooring houses.—*Dr. Wallich.*

MYRISTICA AMYGDHLINA? and M. SPHÆROCARPA? Wild nutmeg tree. There are one or two trees, in the Southern provinces of Tenasserim, belonging to the genus which contains the nutmeg. The fruit has none of the aroma of the nutmeg, but the timber, which is large, is used by the natives in house-carpentry. Griffith found only one species, "apparently," he says, "referable to Louriero's genus Knema." Wallich however, met with two and referred both to Myristica.—*Dr. Mason.*

MYRISTICA CINEREA.

Ban Jai phal. MAHR. | Sandikal maram. TAM.

A great and straight tree, found in the Bombay green-wood jungles or Races, above and below the ghats. It is not sufficiently common, nor found generally in situations easy of access, to allow of its being used for household or agricultural purposes. The wood is white and compact. In Coimbatore, its wood is straight-grained, close, even grained apparently and of fine quality.—*Drs. Wight and Gibson.*

MYRISTICA MOSCHATA, *Thunb.* Common nutmeg tree. This small tree has been introduced into various parts of India from the Moluccas. It is chiefly valued for its aromatic fruit. The wood is said to be hard and close-grained.

MYROLE, OR, MIROLE, in Tamil and Malayala, is a Malabar and Canara wood of much value, but scarce ; it is very heavy and strong, and grows to about twelve inches in diameter, and fifteen or twenty feet high. It is generally used where strength and durability are required.—*Edye, Forests of Malabar and Canara.*

MYSORE WOODS. The forests at Nuggur contain valuable timber, and the large and extending timber trade on the Tumbudra, is forming a new and interesting feature in Mysore. Captain Puckle sent the following Mysore woods to the Exhibition of 1862.

Bobbala, CAN., Babul, Acacia arabica.

Bamboo, Bambusa arundinacea.

Hippay, Bassia longifolia, wood often curiously grained.

Red custard apple, Anona reticulata.

Ructa chandana, Adenanthera pavonina.

Trincomallee. Berrya ammonilla.

Boghy, CAN., Acacia, for furniture, is strong and tough.

Choojelly, CAN., Acacia, has great resilience, useful for all purposes.

Baghy, CAN., Acacia speciosa, for carriage, and house-building.

Hoonassy, CAN., Tamarindus Indica, for naves of wheels, oil mills, mallets, rice-pounders, &c., excellent for brick and tile burning. Heart-wood very hard.

Biti, CAN., Dalbergia latifolia, for furniture of every description.

Honagal, CAN., Terminalia, for furniture and house-building

Wulla Hoonay, CAN., Pterocarpus, for furniture and house-building.

Nellee, CAN., Emblica officinalis, for veneering, good for well-rings, does not decay under water, well adapted for turning.

Nundee, CAN., Lagerstroemia microcarpa, useful for a variety of purposes, has great stiffness, wooden bridges have been built of this. An excellent wood.

Billawar, CAN., Acacia odoratissima, has great toughness or elasticity, makes handsome furniture resembling walnut, and much used in carriage-building for the frame work, felloes and spokes.

Rugta Hanay, CAN., Pterocarpus marsupium, makes handsome furniture, and resembles fine mahogany, but must be well seasoned, or it stains yellow.

Nowladdi, CAN., polishes well, is used for house-building and furniture, &c.

Hindiga, CAN., furniture, polishes and turns well, useful for the cabinet maker, and would do for veneering.

Jalari, CAN., Vatica laccifera, strong useful wood for a variety of purposes.

Kurramutti, CAN., Terminalia tomentosa, house-building, bears a good transverse strain, a wood much esteemed for all railway purposes.

Jambay, CAN., Inga xylocarpa, furniture, shafts, plough heads, knees and crooked timbers in ship-building, and railway sleepers.

Sagwan, CAN., also Teyaga, CAN., Tectona grandis, ship-building, house-building, furniture, &c.

Dindaga, CAN., Conocarpus latifolia, house-building, shafts and yokes, and general use for railway purposes, but makes very good cabinet furniture.

Kuddavailoo, CAN., Nauclea cadamba, for various kinds of furniture.

Sumpaghy CAN., Michelia champaca, very handsome furniture, and polishes well, grows to a very large size, has a yellow sweet scented flower.

Mauvoo, CAN., Mangifera indica, for solid wheels of country carts, and rough furniture.

Godday, CAN., Cedrelaceæ, polishes well, and is good for turning.

Bevoo, CAN., Melia azedarach, common furniture, but it warps and splits.

Mussee, CAN., Lauraceæ, in general demand.

Halasoo, CAN., Jack, ENG., Artocarpus integrifolia, furniture, chairs, tables, &c., but must be well seasoned, or it will warp and crack.

Yettaga, CAN., Nauclea cordifolia, polishes well, resembles boxwood, and is good for turning, cracks and warps, is light and durable if kept from wet.

Thenoon, CAN., Cocos nucifera, ridge poles for temporary roofs, aqueducts, &c.

Somy, CAN., a handsome furniture wood.

Baulay, CAN., Diospyros melanoxylon.

Thadsal, ,, A good fine grained wood.

Joghy ,,

Sime Thengady, Satin wood.

Danum, CAN.

Noname, ,,

Naralay, CAN., Eugenia jambolana, used in ordinary house-building.

Hoongay, CAN., Pongamia glabra.

Punaralay, CAN.

Seebay, CAN.

Gunduggurughy, CAN., Cedar.

Doddu Godda, CAN., Toon?

Casurina muricata, a hard tough wood ; grows fast, and useful for scaffolding poles.

Hooneasee, CAN., Thespesia populnea. Heart-wood, fine, close-grained, gun stocks have been made of it.

Dalchini, CAN., Cinnamon.

Davadary, CAN., Sethia Indica. Timber short but good : the wood fragrant.

Gundha, CAN., Sandalwood, Santalum album.

Honda Bevoo, CAN., scented margosa.

Pathunga, CAN., Cœsalpina sappan.

Karachi, CAN., Bauhinia. A good strong wood, somewhat like black-wood.

Padrio, CAN.

Nullacrua, CAN.

Seemy thengady, CAN.

Chillala, CAN.

Chittay ,,

Kittalay, Orange, Citrus aurantium.

—*Dr. Cleghorn, Conservator's Report, Captain Puckle in Mad. Cat. Ex.* 1862.

N

NAGAKUNNY, TAM.? A Tinnevelly wood of a whitish brown colour, used for building in general.—*Colonel Frith.*

NA GHEE, BURM. A timber of Tenasserim, of maximum girth 3 cubits, and maximum length 15 feet. Abundant all over the Tenasserim provinces. When seasoned it floats in water. It is a tolerably good wood, used for mallets, but not durable enough to be recommended.—*Captain Dance.*

CSL

NAGISHVORO, Uria. Of Ganjam and Goomsur, supposed to be Mesua ferrea? Its extreme height is 30 feet, circumference 3½ feet, and height from the ground to the intersection of the first branch, 9 feet. A medicine, used for diarrhœa, rheumatism, &c., is extracted from the flower. The flowers are also worn by the Oriyas, and the Rajahs stuff their pillows with them. The tree is tolerably common, but no use seems to be made of the wood.—*Captain Macdonald.*

NAGPORE WOODS. *See* Central Provinces.

NALLA MALLA. *See* Cuddapah.

NA-KYEEN, Burm. In Amherst a timber employed for house-posts and rafters. This is the soondrie wood of Calcutta, Heritiera minor, where it is so common as to serve for fire-wood, although, from its superior qualities for buggy-shafts, hackery or cart axles and wheels and other purposes requiring great strength and toughness, it is highly prized.—*Cat. Ex.* 1862.

NANAH, Tam. This is a new species of Bassia which grows in Travancore and Malabar to about 12 feet in height, and 10 inches in diameter. It is generally curved in its growth, and very soft and light. It resembles the American red birch as to its silvery grain. The native carpenters use it for the frames of small vessels. It is of little value in consequence of its early decay. —*Edye, Forests of Malabar and Canara, Major Beddome.*

NANAMBOO, Tam.? A wood of Travancore, of a brown colour. Used for common buildings.—*Col. Frith.*

NANGKA, Malay. *Jack*, Eng. This and the Champadah, are varieties of Artocarpus integrifolia, and differ from each other in the smaller size, and hairy stems of the latter. —*Low's Sarawak, p.* 73.

NAOO, Burm. In Amherst, a timber used for house-posts: the leaves, flowers and roots are said to be used for medicine. It is a brown, substantial, solid wood, not liable to the attacks of insects.—*Cat. Ex.* 1851.

NA PEW GEE, Burm., or LET THOUK GEE, Burm. In Amherst, Tavoy and Mergui, a wood of maximum girth 1½ cubits, and maximum length 14 feet. Abundant all over the provinces. When seasoned, it floats in water. It is a wood of inferior grain, and not durable. —*Captain Dance.*

NARAH, the Malayala name of a Malabar and Canara tree that grows to about twelve feet high, and ten inches in diameter. It is curved in growth, and is used for the frames of vessels. It is not very durable, and ranks as one of the inferior sorts of jungle wood.—*Edye, Forests of Malabar and Canara.*

NAR-PUTTE, the Tamil name of a Ceylon tree which is used for canoes, planks of vessels, &c. It grows to about thirty feet in height, and twenty inches in diameter. It is not durable, and is of little use.—*Edye, Ceylon.*

NARVELL, a Ceylon wood, sometimes called Jambu, in Tamil and Portuguese. It grows to about eighteen inches in diameter, and from ten to fourteen feet in height. It is used for the frames of native vessels and boats, but is not considered a very durable wood. After it has attained its full growth it produces a berry which the natives use as food.—*Edye, Ceylon.* (*Note*—Is this a species of Eugenia, or the Dillenia speciosa of Thunb.?)

NASHTAR, is a Persian word, the only one in the language, for all kinds of pines from the chil upwards. It is imported into the Pashtu language.

NAT-GYEE, Burm. A tree of Moulmein, wood used for posts and knife handles.—*Cal. Cat. Ex.* 1862.

NA-THAT, Burm. In Pegu, a forest term for trees that have died from natural causes. The term seems to be applied also to seasoned timber, or to trees that have been girdled.—*McClelland's Report, No. XXVIII, p.* 2.

NAT-TA-MIN, Burm. A reddish-grey wood of British Burmah, loose-grained, and recommended for cigar boxes. Breaking weight 129 lbs.; a cubic foot weighs 33 lbs. In a full-grown tree on good soil the average length of the trunk to the first branch is 60 feet, and average girth measured at 6 feet from the ground is 6 feet. It sells at 4 annas per cubic foot.—*Dr. Brandis, Cal. Cat. Ex.* 1862.

NAUCLEA ? ? *Species.*

Babdat. Hind.
Bhada. ,,
Behra. Hind.
Hirida. Mahr.

Under these names, Captain Sankey notices a nice clean working Nagpore wood, of a yellow colour and straight grain, which has apparently but little essential oil. It is very scarce, but when obtainable, is used by the natives for all purposes; in strength it ranks next to "eyne," and, therefore, if procurable, in large quantities, and of a proper size, would be a most valuable wood. The timber procurable ranges from 15 to 17 feet in length, and is about 3 feet in girth.—*Captain Sankey.*

NAUCLEA, *Species.*

Hagin Kae. Can.
Hagin Mara. Can.

A tree of Canara and Sunda. Flower not seen. It is frequent in the upper third of the ghats to the south. Wood described as being strong and serviceable for houses and implements.—*Dr. Gibson.*

CSL

NAUCLEA, *Species*.

Hteinthay. BURM.

A wood of British Burmah not used. Breaking weight 170 lbs.. A cubic foot weighs 35 lbs. In a full-grown tree on good soil the average length of the trunk to the first branch is 30 feet, and average girth measured at 6 feet from the ground is 6 feet. It sells at 8 annas per cubic foot.—*Dr. Brandis, Cal. Cat. Ex.* 1862.

NAUCLEA CADAMBA, *Wall.*; *Roxb.*

Maoo-ka-doon. BURM.
Kudda-vailoo. CAN.
Kaddam. HIND.
Halamba-gass. SINGH.
Vella cadamba. TAM.
Kodombo. TEL.
Rudrakshamba. ,,

This is a noble ornamental tree of India and British Burmah, with orange-coloured flowers. It is common in Ceylon, up to an elevation of 2,000 feet. It is found in Travancore and in the Dekhan, where it grows to a large size near villages, also in Ganjam and Goomsur, is plentiful in Kotah and Bondee, though rare at Ajmir grows in Kumaon, is sometimes cultivated in the Tenasserim provinces and grows at Moulmein. It attains a height of 70 to 80 feet, with a girth of from 6 to 12 feet. In Ganjam and Goomsur, its extreme height is 80 feet with a stem of 32 feet to the nearest branch. It is there made into boats, and its flowers are offered to the hindu idols. In Mysore, it is used for various kinds of furniture, the wood is of a deep-yellow or brownish colour, but loose-grained, and does not stand wet. A cubic foot weighs lbs. 37. In Burmah, in a full-grown tree, on good soil, the average length of the trunk to the first branch is 70 feet, and average girth measured at 6 feet from the ground is 15 feet. It sells, in Burmah, at 8 annas per cubic foot, and is suitable for furniture.—*Roxb.*, i, 512, *Voigt*, 375, *Thw. En. Pl. Zeyl.*, *Captain Macdonald*, *Dr. Cleghorn*, *Cal. Cat. Ex. of* 1862, *Captain Puckle in Mad. Cat. Ex.* 1862, *Irvine's Med. Top.* *Mr. R. Thompson.*

NAUCLEA COADUNATA, *Roxb.*; *DC. Prod.*

N. cordata, *Roxb.*
Bakmee-gass. SINGH.

Common in the warmer parts of Ceylon: wood not known.—*Roxb.*, i, 579, *Voigt*, 374, *Thw. En. Pl. Zeyl.*, *II*, *p.* 137.

NAUCLEA CORDIFOLIA, *Roxb.*

Keli-kuddum. BENG.
H'nau. BURM.
Yetlay-ga? CAN.
Hedde. ,,
Hurdoo? HIND.?
Hedoo. MAHR.
Huldoo. PANJAB.
Colong-gass. SINGH.
Manje Kadambo. TAM.
Manja Kadamba. TAM.
Daduga. TEL.
Holondbo of Ganjam and Goomsur.
Paspoo Karami. TEL. of the Godavery.
Bundaroo. TEL. of the Godavery.

This large tree grows in the hot drier parts of Ceylon, and abundantly in the mountainous districts of the peninsula of India. It is a common tree in the coast forests of the Bombay Presidency, but never found inland,—it is getting scarce in Ganjam and Goomsur. It is said to be a tree of Jubbulpore, abundant, and its wood much in request, being light and easily worked. Its strength is not great, but it is lasting if not exposed to the weather. It is abundant in the N. W. Provinces of India, has now become scarce in Kumaon, where at one time there were forests of it, but Mr. R. Thompson speaks highly of its light-yellow, close-grained durable timber, which turns nut-brown on seasoning, and when varnished looks very pretty. It yields, however, only a poor wood in the Siwalik hills. In British Burmah it appears as a large tree of regular growth, but not very common. In Ganjam and Goomsur it attains an extreme height of 75 feet with a circumference of 7 feet, the height from the ground to the first branch being 36 feet: but, in British Burmah, in a full-grown tree, on good soil, the average length of the trunk to the first branch is 80 feet, and average girth measured at 6 feet from the ground is 10 feet, and, there, a cubic foot weighs 42 lbs. and sells at 12 annas. The wood is pretty, yellow, rather close-grained, and is soft, and easily worked. In Coimbatore, it is much used for common purposes, and sustains a weight of 320 lbs. In the Bombay Presidency, it is most extensively used for all purposes of planking in in-door work. The timber deteriorates from steeping, and therefore should not be floated to its destination. In Goomsur and Ganjam, on account of its size and lightness, it is used for the boats, which are made there of a single log of it by simply scooping out the inside and afterwards shaping in a rough manner. It is also used for the masts of native dhoneys, and bazar measures, and is cut into planks and made into doors, boxes, &c. It is best suited for work which is sheltered, bedsteads, &c., being much affected by alternations of dry and wet weather. It seems best suited for house-carpentry and furniture. In Burmah it is used for combs. Dr. Gibson, writing from the Bombay side of India, remarks that the timber could probably be creosoted with advantage. It is said to be a good wood for model work, it polishes well, resembles box-wood, and is good for turning; but it cracks and warps. It is light and durable if kept from wet.—*Roxb.*, i, 514, *Voigt*, 375, *Thw.*, *Drs. Wight, Gibson, Brandis and Stewart*, *Captain Macdonald*, *Cal. Cat. Ex.* 1862, *Madras, do. do.*, *Mr. R. Thompson.*

NAUCLEA DIVERSIFOLIA, *Wall.*

Ringah? BURM.
Bingah? ,,
Pungah? BURM.

Wood of British Burmah, of a light-yellow colour, not much used, but may be recommended for furniture. A cubic foot weighs lbs. 45. In a full-grown tree on good soil, the average length of the trunk to the first branch is 60 feet, and average girth measured at 6 feet from the ground is 7½ feet. It sells at 8 annas per cubic foot.—*Dr. Brandis, Cal. Cat. Ex.* 1862.

NAUCLEA ELLIPTICA, *Dalzell.*

Hteingalah. BURM.

A wood of British Burmah, of a light chesnut colour, recommended for furniture. Breaking weight 208 lbs. A cubic foot weighs lbs. 43 to 56. In a full-grown tree on good soil the average length of the trunk to the first branch is 40 feet, and average girth measured at 6 feet from the ground is 6 feet. It sells at 8 annas per cubic foot.—*Dr Brandis, Cal. Cat. Ex.* 1862.

NAUCLEA PARVIFOLIA, *Roxb.; Willde.*

N. parviflora, *Pers.*
N. orientalis, *Gærtn.*
Cephalanthus pilulifer, *Lam.*

H'tein. BURM.
Hedoo mara. CAN.
Kuta mara. ,,
Yetega. ,,
Yetegal. ,,
Kuddum. ,,
Kaim of Panjab.
Kalham of Panjab.
Helembé. SINGH.
Nir kuddembay maram. TAM.
Buta Karamee. TEL.
Moondo-monde. URIA ?

This large tree is found in Canara and Sunda, in the W. and N. of Ceylon, in the hot, drier parts of the island, where its close-grained hard timber is used for common house-building purposes. It weighs lbs. 42 to the cubic foot and is calculated to last 40 years. Dr. Wight, writing in Coimbatore, says, this is a strong fine grained timber, sustaining a weight of 400 lbs. Beams of considerable size are procurable. The wood is dark-coloured but, according to Dr. Roxburgh, soon rots if exposed to wet. From the fineness of its grain it seems well fitted for cabinet purposes, and has the advantage of being easily worked. It is also frequent on the Western coast, and is valued there, for yielding flooring planks, packing boxes, &c. It is mentioned by Capt. Macdonald as a tree of Ganjam and Goomsur, of extreme height 60 feet, circumference 4½ feet, and height from the ground to the intersection of the first branch, 22 feet. The wood is used there, occasionally, for beams, planks, &c., but is not in much request, and the tree is not very plentiful. Dr. Gibson says that, in the Bombay Presidency, it is rather a common tree in the coast forests; less so inland. It is found, however, in quantities in the dells above the ghats. The wood is reddish coloured close-grained, and rather valuable for gunstocks, for which it is chiefly used. This wood could not be easily creosoted. That of the Sunda and Canara forests is valued as affording the best plank for flooring of houses and house beams. It is found in the Nalla mallai, and is a hard, tough wood, light red in colour and, used there, as yokes, posts and small beams. In British Burmah, a cubic foot weighs lbs. 43, and it is used for planking. In a full-grown tree on good soil the average length of the trunk to the first branch is 30 feet, and average girth, measured at 6 feet from the ground is 6 feet. It occurs, though sparse in Kumaon and Gurhwal. Dr. Stewart tells us that it grows to a considerable size in the Siwalik range, up to the Beas and Chenab rivers, attaining a height of 50 or 60 feet with 10 to 13 feet of girth. The wood is, there, white, light and soft, and used for planks, combs, beams of native houses, packing chests, agricultural instruments and gunstocks. It is liable to be attacked by insects, and will not stand wet.—*Roxb.* i, 513, *Voigt,* 375, *Drs. J. L. Stewart, p.* 116, *Wight, Gibson and Brandis, Captain Macdonald, Cal. Cat. Ex. of* 1862, *Messrs. Mendis, Latham and Thompson, Thw., p.* 137.

NAUCLEA UNDULATA, *Wall.*

Ma-oo let-tan. BURM.

A soft useless wood in British Burmah, decays in less than a year. Breaking weight 80 to 120 lbs. A cubic foot weighs 22 to 34 lbs. In a full-grown tree on good soil the average length of the trunk to the first branch is 100 feet, and average girth measured at six feet from the ground is 15 feet. It sells at 2 annas per cubic foot.—*Roxb.* i, 508, *Voigt,* 374, *Dr. Brandis, Cal. Cat. Ex. of* 1862.

NAUNGOO, TAM. Mesua Coromandeliana. A wood of Tinnevelly, of a red colour, specific gravity 1·009. Used for building, wheelwrights' work, handspikes.—*Col. Frith, Major Beddome.*

NAURVEALY, the Tamil name of a Ceylon tree, which grows to about twenty inches in diameter, and fifteen feet in height, not of much use. It produces a small red fruit which is of a very glutinous nature, and much esteemed by the natives of Malabar. From the bark of this tree a kind of cordage is made, which is used for the purposes required in the hills, and in the conveyance of timber, &c.—*Edye, Ceylon.* (*Note.*—Is this the Narwali or Narvali tree, Cordia angustifolia, found common near Severndroog where ropes are made of the fibres ?

NAVELLU MARAM. The Tamil name of a Malabar tree which signifies "tongue-wood." It grows to about fifteen inches in diameter, and twenty feet high: it is considered a strong and durable wood, and more particularly so under water. The native carpenters prefer it for the frames of small vessels in consequence of its strength and durability.—*Edye, Forests of Malabar and Canara.*

CSL

N[illegible]OO-GA, BURM. A Tenasserim wood, of maximum girth 3 cubits, and maximum length 22 feet. Scarce, but found all over the Tenasserim provinces. When seasoned it floats in water. It is a durable, tolerably good wood with a curled grain ; used by Burmese for oars, much like English oak in appearance, but deficient in tenacity. It is scarce, and equally good woods are abundant.—*Captain Dance.*

NBU-BAY, BURM. A Burmese wood, one of the Anacardiaceæ, has a dense wood, and brittle.—*Major Benson.*

NEBEDE, SINGH. A wood of Ceylon, used for common house-building purposes. The tree grows in the southern and western parts of the island. A cubic foot weighs 51 lbs., and it is esteemed to last 20 years.—*Mr. Mendis.*

NEBONG. A Penang wood of a dark colour. It is from a tall and thin, but straight, tree ; used for railings. *See* NIBONG.

NEELAHAM PELLAH, TAM. ? A Travancore wood of a light-brown colour. Used for house-building, ceilings, &c.—*Col. Frith.*

NEELUM PALLAH, TAM. ? A Travancore wood of a light-brown colour. Used for light work.—*Col. Frith.*

NEEN THA, BURM. Very abundant along the sea coast near Tavoy and Mergui. When seasoned it sinks in water. It is used for rafters of houses, is a very heavy wood, but liable to split, therefore not recommended for ordnance purposes.—*Captain Dance.*

NEILGHERRY SHOLAS. The revenue from those in the hill stations of Ootacamund, Wellington and Coonoor, is derived from sales of contracts for firewood and contracts for sale of charcoal. There is a thriving fringe of Pinus longifolia on the west side of the old plantations, and this tree should be more cultivated. From the commencement of planting, in 1856, about 106 acres have been planted with 2,40,000 young plants, chiefly Acacia melanoxylon and molissima, but there are also a few Eucalyptus trees growing very well.—*Dr. Cleghorn's Reports, Rep. Con. For., p. 33, Major Beddome.*

NELLY, TAM. A Travancore wood of a light-brown colour. Used for building in general.—*Col. Frith.*

NELU. The Tamil name of a Malabar tree which is of a dark-red colour, and is considered a good wood for boat work ; it produces a small fruit which the natives eat in a raw state.—*Edye, Forests of Malabar and Canara.*

NELLA POLEEKI, TEL. In the Nalla Mallai, a light wood, of coarse-grain, unserviceable except for temporary purposes.—*Mr. Latham.*

NEPHELIUM, *Species.*

Gal morre. SINGH.

A tree of the Central province of Ceylon ; the wood weighs 65 lbs. to a cubic foot, and is calculated to last 30 years. It is used in house-building. Its berries are eaten when ripe by the natives. It supplies the best kind of firewood for brick and lime kilns.—*Mr. Mendis.* (*Note*.—It is not known to what species Mr. Mendis here alludes. Mr. Thwaites notices three in Ceylon, viz., Nephelium bifoliatum, *Thw.*, a moderate-sized tree on the lower Badulla road from Kandy, at no great elevation which flowers in April ; Nephelium eximium, a large tree of the central province, at an elevation of 1,000 to 2,000 feet, flowers in May and fruits in July, and Nephelium erectum, *Thw.*, also of the central province, up to an elevation of 3,000 feet.—*Thw. En. Pl. Zeyl., I., p. 57.* Besides these N. lichi occurs in China and India, N. rimosum in Sylhet : N. lappaceum in Malayana, N. rubrum in Sylhet, N. variabile in the Khassya, N. verticillatum in the Moluccas, and Nephelium stipulaceum, *Bedd.* in Madras.

NEPHELIUM LONGAN, *Camb.*

Euphoria longana, *Lam.*
Scytalia longan, *Roxb.*
Dimocarpus longan, *Lour.*

Wumb. MAHR.
Mora-gaha. SINGH.
Poovutty maram. TAM.

A tree of the peninsula of India, the Khassia hills, the Malay peninsula, Cochin-China and China. A moderate-sized tree having a straight trunk and fine globular head. It occurs in Coimbatore, but is rare in the Bombay presidency, being confined to their race or green-wood jungles. The wood is white, hard and close-grained, but it is not used in carpentry by the natives who seem to be unacquainted with it—*Drs. Wight and Gibson.*

NERA, TEL. ? Mr. Latham, describing the Nalla Mallai, says this name is probably incorrect and is used for Nerar the Syzigium jambolana. He adds, " Balfour calls a Neredu, నేరేడు, Eugenia (Syzigium) jambolana."—*Latham.*

NERASO, URIA. In Ganjam and Goomsur a tree with an extreme height of 25 feet, and a circumference of 2½ feet. Height from the ground to the intersection of the first branch, 8 feet. It is tolerably common and burnt for firewood. Ploughshares are sometimes made of the wood. The bark is used medicinally for wounds.—*Capt. Macdonald.*

NERIUM ANTIDYSENTERICUM, *Linn.*

Wrightia antidysenterica, *R. Br.*

Doola kooda. MAHR.
Veppalei maram. TEL.
Kooda pallie maram. TAM.

A very common shrub, in waste places, and on hills all over the south Konkan, less so in the Konkan and the interior, though still common even there. It is met with in Coimbatore and in the South of India, where the wood is said to be excellent for cabinet-making purposes. It is hard and fit for the turner, but never reaches sufficient size to render it fit for the carpenter. Its bark is used medicinally.—*Drs. Wight and Gibson.*

NERIUM ODORATUM, *Lam.*

Nerium Indicum, *Mill.*
,, odorum, *Ait.*
Nerium oleander, *Lour.*

Kaner. HIND.
Gandehra of Kulu.
Goonaieho. TEL.

Under these names, Captain Macdonald notices a tree of Ganjam and Goomsur, extreme height 25 feet, circumference 2 feet, and height from the ground to the intersection of the first branch, 6 feet. He adds, this is the oleander tree and is tolerably common. —*Captain Macdonald.* (*Note.*—As the oleander is a shrub, and its Telugu names are Ganneru and Kasturi patte, it is desirable to identify this tree.

NERRELOO, SINGH. Under this Singalese name, to which he attaches the botanical name, Illecebrum latrum, Mr. A. Mendis describes a tree of the central province of Ceylon, the wood of which weighs lbs. 56 to the cubic foot, and is said to last 40 years. It is used in common house-building.—*Mr. Mendis.*

NEW ZEALAND has the following timber trees :—

Aralia crassifolia.
Edwardsia microphylla.
Elæocarpus hinau.
Eugenia maire.
Dacrydium cupressinum.
,, excelsum.
,, mai.
Dammara australis.
Kaetatowa.
Melicytus ramiflorus.
Merista lævigata.
Metrosideros robusta.
Podocarpus ferruginea.
,, totara.
Rota.
Thuja Doniana.
Vitex littoralis.

NGA-SOAY, BURM. In Amherst, a solid, very heavy, reddish wood, and answers for house posts and rafters.—*Cat. Ex.* 1851.

NGOO-BENG. In Tavoy, a strong wood used for posts and planking.—*Dr. Wallich.*

NGY-SOUNG-THA, BURM. A Tenasserim wood of maximum girth 3½ cubits, and maximum length 22 feet. Abundant all over the provinces. When seasoned it floats in water. It is a wood of no durability or strength : splits readily, with a short grain, and is only fit for firewood.—*Captain Dance.*

NIBONG. At the time of Pigafetta's visit, the town of Borneo was built of wood on strong and substantial posts : it is now constructed entirely of nibong, which soon decays, and is thatched with the nipah-leaves, of which also the sides are composed. *Sarawak, p. 150. See* NEEBONG.

NIDAM PAINI, the Malayala name of a Malabar tree which means long Paini. It grows to about two feet in diameter and seventy feet high, and produces a sort of varnish which is used with wood oil for painting wood. The natives used the spars for rafting timber down the rivers, and for the yards of small vessels. It is a wood of little value, being neither strong nor durable.—*Edye, Forests of Malabar and Canara.*

NILAM PALA, the Tamil name of a Malabar tree that grows to about twelve or fifteen inches in diameter: it is not of much consideration ; it produces a small fruit which is used by the natives medicinally.—*Edye, Forests of Malabar and Canara.*

NILA PALA, the Tamil name of a small tree of Malabar, the wood of which is very close-grained ; it is used in house-work. The root of this tree is used as a medicine, and applied in cases of rheumatism ; this tree is only found in Travancore, and there it is sacred.—*Edye, Forests of Malabar and Canara.*

NIPA FRUTICANS?

Cocos nypa, *Lour.*

A low palm of the Archipelago, chiefly valuable for its leaves, which are much used as thatch for the roofs of houses. The pulpy kernels of the fruit (called buah atop) are preserved as a sweetmeat, but are entirely without flavour.—*Marsden's Hist. of Sumatra.*

NOALEE-LYENG, BURM. In Tavoy, a close-grained, strong, heavy wood ; useful for handles.—*Dr. Wallich.*

NOONIAREE, Looniaree or Noononoonea, URIA. Under these names, Captain Macdonald notices a tree of Ganjam and Goomsur, of extreme height 36 feet, circumference 4 feet, and height from the ground to the intersection of the first branch 7 feet. It is a common tree, chiefly used for firewood, though ploughshares are occasionally made from this wood. The bark is employed medicinally in fever.—*Captain Macdonald.*

NORFOLK ISLAND yields timber from the Araucaria excelsa, Baloghia lucida, Lagunaria Patersonii and Notelæa longifolia.

NOTELÆA LONGIFOLIA, the "*Iron-wood*" of Norfolk Island, is used in all wheelwright's work, and is very hard and durable. It is also used for cabinet work, and, when French-polished, it is not excelled by any of the fancy woods.—*Keppel's Ind. Arch., Vol. II, p.* 283.

NOVA, TAM. A Palghat wood of a white colour, used for shafts, cart-poles, &c.—*Colonel Frith.*

VILADDA, CAN. of Mysore. This wood polishes well, is used for house-building and furniture.—*Captain Puckle, Cat. Ex.* 1862.

NUFFELL, TAM. A Tinnevelly wood of a red colour ; specific gravity 0·717. Used for building in general.—*Col. Frith.*

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NURMANJEE, TAM. A Travancore wood of a bamboo colour ; used for light work.—*Col. Frith.*

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NUSSIESSYA HYPOLEUCA.

Bœhmeria salicifolia.

Siharu. PANJAB.

A shrub of the Panjab. Elevation, 6,000 feet.—*Powell.*

NYCTANTHES ARBOR-TRISTIS, *Linn. ; Roxb.*

Harsing. CAN.
Sorrowful nyctanthes. ENG.
Kirsaru. GONDI.
Hursinghar. HIND.
Bar-jat. ,,
Harri. ,,
Sephalica. SANS.
Keysur. DUK.
Sepala. SINGH.
Sepalika-gaha. ,,
Paghala mallie. TAM.
Manja-pu-maram. ,,
Poghada mullai. TEL.
Karcheea of the Godavery.

The tree of mourning or sorrowful nyctanthes tree, is a great favorite in India, for its delicate orange and white blossoms, which pour their delicious fragrance on the evening air, and then fall in showers bestrewing the earth's cold bosom with sweetness. It has a hard useful wood, though it does not attain much size. It is very abundant, wild, at the foot of the Vindhya range, where its green tough stalks are used to make large grain baskets. Bark used for tanning, and flowers for dyeing silk of a yellow colour.—*Drs. Ainslie, Mason and Irvine, Captains Beddome and Macdonald, Mr. Fergusson.*

NYOAY-SHA, BURM. A tree of Moulmein, wood used for building material.—*Cal. Cat. Ex.* 1862.

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OAK, ENG.

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Eeg. DAN.
Eik. DUT.
Chene. FR.
Eiche. GER.
Quercia. IT.
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In the tract of country from Asia Minor, along the north of Persia, through the Himalayas to China and Japan, also in the Tenasserim provinces, many species of Oak occur, but, in the presence of other valuable timber trees, their woods do not attract the same attention as that of English oak. An oak is mentioned in the Holy Scriptures, but it is not identical with that of Britain, being either the evergreen oak (*Quercus ilex*), or a species nearly resembling it. Near Shechem there stood also a tree of the same genus which probably was remarkable for its size, being called in Genesis xxxv. 4, "The Oak which was by Shechem." In the war of 1812-13 and 14, the natives of the peninsula and the French both frequently fed on the acorns in the woods of Portugal and Spain. In Morocco and Algiers, the acorns of *Quercus ballota* are sold in the public markets, and the acorns "balut" of some of the oaks are met with in all the Indian bazars. In Japan, 23 species occur.—*John's Forest Trees of Britain, Vol. I, p.* 51, *McCulloch's Commercial Dictionary, p.* 854. *See Japan, Panjab, Quercus.*

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OCHNA. of this genus several species are known, viz., nana of Goruckpoor, Wightiana of Travancore, Heyneana of the peninsula, Mauritiana of Mauritius, and cilita of Madagascar.

OCHNA MOONII, *Thw.*

Mal-kæra. SINGH.

A small tree of Ceylon. Wood small but very tough.—*Fergusson.*

OCHNA SQUARROSA, *Willde.*

Kanuk-champa. BENG.
Sunari. TEL.

A tree of the Circars and Godavery jungles, western forests, and both peninsulas. Wood reddish and pretty, but warps and splits.—*Roxb.*, ii, 643, *Voigt, p.* 181, *Major Beddome.*

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GSL

3 feet in circumference, used for tent-pegs, mallets, &c.—*Col. Frith.*

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ODINA WODIER, *Roxb.*

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Hik-gass. ,,
Kemal also Kyamal of the Murree Hills.
Kamlai also Kambal of Salt Range.
Jingan of Simla Hills.
Dila of Shapu.
Ude. Tam.
Anni carra. Tam.
Ooday maram. Tam.
Goompana chettu. Tel.
,, karra. ,,

A large tree which grows in the warmer parts of the island of Ceylon, up to an elevation of 1,530 feet, and is there a useful tree. It is also a native of mountainous districts in the peninsula of India. It grows in Coimbatore, and it is found in the coast jungles of the Bombay presidency, but it is not common. In the Madras presidency, it is grown from cuttings and planted in avenues, but it yields no shade in the hot weather, being without leaves till June. It grows in the Bhabur forests of Kumaon to 12 or 15 feet, clear of branches and ascends the mountain slopes. The tree is rather common on the hills of British Burmah. The heart-wood is red and used for sheaths of swords, spear handles, oil presses and rice-pounders. A cubic foot weighs 65 lbs. In a full-grown tree on good soil the average length of the trunk to the first branch is 50 feet, and the average girth measured at 6 feet from the ground, is 12 feet. It sells in Pegu at 12 annas per cubic foot. The wood is very difficult to season, requiring to be kept, even in planks, 2 or 3 years, but once well seasoned, it is a close-grained, hard, dark-coloured beautiful wood, well adapted for cabinet making purposes, the central reddish portions in particular. This, or another species, occurs quite common from Moulmein to Tounghoo, where it yields a valuable timber. It is much used at Sha-waygyen, in the manufacture of oil presses and rice-pounders. The tree sometimes attains a girth of twelve feet. Dr. Gibson however says, that in the Bombay presidency it is deemed of no value; and Major Pearson and Mr. Jacob in the Central Provinces repeat this low estimate. A considerable quantity of gum exudes from the trunk of this tree, which the natives use as a medicinal application.—*Thw. En. Pl. Zeyl., p. 78, Drs. Wight, Cleghorn, Gibson, Mason, Brandis and Stewart, Major Pearson, Messrs. W. Fergusson, R. Thompson and W. Jacob, Cal. Cat. Ex.* 1862.

ODOORAH VENGA, Tam. ? A wood of Travancore, of a dark-brown colour, specific gravity 0·853. Four feet in circumference and 40 feet long; a strong good wood, used for wheels, gun carriages, &c.—*Col. Frith.*

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OLAX ZEYLANICA.

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Under these names, Mr. Mendis describes a tree of the Eastern province of Ceylon, the wood of which is used for common purposes of house-building. A cubic foot weighs lbs. 64, and it is said to last 40 years.—*Mr. Mendis.*

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Var. cuspidata, *Wall.*
Olea ferruginea, *Royle.*

Olive. Eng.
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OLEA GLANDULIFERA, *Wall.; W. Ic.*

Gyr.

A small-sized handsome tree, in the shady dells and ravines of Kumaon, and grows also in the mountains near Dehra-dhoon and in the hills of Southern India. Its timber is of a light colour, heavy, close-grained and very durable, takes a high polish, and is valued in turnery and carpentry work.—*Mr. Thompson, Voigt*, 547.

OODOOGOO, Tam. Alangium, *Sp.* A large tree of Palghat, wood of a red colour; used for ploughs and building.—*Col. Frith, Major Beddome.*

OOME TEAK, Tam. of Palghat, wood of a dark-brown colour. Third-rate teak.—*Col. Frith.*

OONNAY, Tam. A wood of Tinnevelly, of a red colour; specific gravity 0·928. A strong wood used for wheelwright's work, hand spikes.—*Col. Frith.*

OOSULAY, Tam.? A wood of Tinnevelly, of a light-brown colour; specific gravity 0·832; building in general.—*Col. Frith.*

ORGOON? A light-brown coloured wood, close-grained and strong, grows in the Santhal jungles, plentiful near Sooree and scarce beyond Ranee-bahal up to Hasdiha. Used by the natives for building purposes and might be used in the construction of timber bridges.—*Cal. Engineer's Journal, July* 1860.

OROPHEA. A genus of middle-sized trees of Ceylon, O. coriacea grows at Dimboola and Raxawa in the central provinces, at an elevation of about 3,000 feet: O. obliqua, *Hf. et T.*, in the Galle and Ratnapoora districts, at no great elevation, and O. zeylanica, *Blume*, in the central provinces, at an elevation of 2,000 to 3,000 feet.—*Thw. En. Pl. Zeyl.*, p. 8.

OROPHEA ERYTHROCARPA, *Bedd.* A tree of the moist forests of the Anamullay Hills, with a small wood, but strong and close-grained.—*Major Beddome.*

ORUPU-LINGI MARAM. The Malayala name of a Malabar tree that grows to about twelve feet high and ten inches in diameter: it is very close-grained and durable.—*Edye, Forests of Malabar and Canara.*

OSHOKO, Uria. Jonesia asoka. A tree of Ganjam and Goomsur, of extreme height 50 feet, circumference 3 feet, and height from the ground to the intersection of the first branch, 8 feet. Scarce in Goomsur, but abounds in Bodogoda, where it is burnt for firewood. The flowers are offered at the shrines of the Hindu divinities. The bark is used medicinally in diarrhœa.—*Captain Macdonald, Major Beddome.*

OSYRIS PELTATA.

Pha-oun. Burm.

This is found in Tavoy.—*Wall.*

OUK-GUAY, Burm. This tree is found all over the Tenasserim provinces, but it is scarce, and yields a perishable short-grained wood. It is not heavy and floats in water when seasoned. Its maximum length is 15 feet and maximum girth 1½ cubits.—*Captain Dance.*

OUK-KYINE, Burm. A tree of Moulmein, wood used in ordinary house-building. *Cal. Cat. Ex.* 1862.

OUN-THUAY, Burm.? This white, soft, wood, is met with in Amherst, where it is employed for common carpentry purposes. It is not subject to injury from insects.—*Capt. Dance.*

P

PAD-DAN, Burm. In Amherst, a timber used for making drums and musical instruments. It is a kind of red sanders wood. —*Cat. Ex.* 1851.

PADRI. The Tamil and Malayala name of a Malabar and Canara tree, which is about twenty feet long and eight inches in diameter: it produces a small white flower, in shape like the fuchsia (?) or rather the snow drop, which has a most powerful fragrance; they are prescribed in infusion as a cooling drink in fevers. The leaves, if steeped in a portion of lime juice, make a most grateful and cooling drink. This is one of the sacred trees, and considered the property of the pagoda; and the flowers are held sacred for the purpose of decorating the dancing-girls' heads on days of ceremony. —*Edye, Forests of Malabar and Canara.* (*Note.*—Is this one of the Bignonia, B. chelonoides?)

PA-KA-THAN, Burm. A timber tree of Amherst, Tavoy and Mergui, of maximum girth 2 cubits, and maximum length 12 feet. Abundant, but scattered all over these provinces, inland. Its timber, when seasoned, floats in water. It is used by Burmese to make paddles, oars, &c.; is a tough, durable, good wood, but too widely scattered to be easily obtained, unless such a large quantity be ordered as would repay a search in the forest. —*Captain Dance.*

PALA ? In Penang, a tall thin tree ; wood used for planks.—*Col. Frith.*

PALA MARAM. The Malayala name of one of the jungle fruit trees of Malabar and Canara. It produces a fruit which the natives use medicinally, but as a timber it is of no value.—*Edye, Forests of Malabar and Canara.* (*Note*—Is this the Mimusops hexandra ?)

PAL UTAN ? In Penang, a wood of light-brown-colour, got from a large tree ; only used for planks.—*Col. Frith.*

PALAVARAYNEE, TEL. In the Nalla Mallay, a light, yellow, hard wood, which Mr. Latham thinks is the *Peda kalmesnra* of the Northern Circars.—*Mr. Latham.*

PALAWAH, BURM. A beautiful but heavy red wood of British Burmah. A cubic foot weighs lbs. 52. In a full-grown tree on good soil the average length of the trunk to the first branch is 45 feet, and average girth measured at 6 feet from the ground is 6 feet. It sells at 12 annas per cubic foot.—*Dr. Brandis, Cal. Cat. Ex.* 1862.

PALENGA ZEYLANICA, *Thw.*

Palenga-gass. SINGH.

A large tree, 40 to 50 feet high, of the Ambagamowa district in Ceylon, growing at an elevation of about 3,000 feet.—*Thw. En. Pl. Zeyl., p.* 287, *Mr. Fergusson.*

PALI, In Tamil, Irambu in Malabar, Palari in Portuguese : is the Ceylon wood known in England by the name of Iron-wood. It grows to about thirty feet in height, and twenty inches in diameter. It is very useful for stocks of anchors, piles for jetty-heads, beams in store-houses and places where strength is required ; for such purposes it will be found useful and durable : it may be obtained in great quantities at a very moderate rate.—*Edye on the Timber of Ceylon.* (*Note.* —Is this a species of Mesua? M. ferrea.)

PALIURUS ACULEATA.

Christ's Thorn. ENG. | Thûm of Kanáwar.

Grows in the N. W. Himalaya : is common in the Holy Land and is there called Christ's thorn, from a tradition that the platted crown of thorns was made of its twigs.—*Dr. J. L. Stewart.*

PALLAGA PAYANYE. The Malayala name of a Malabar and Canara tree, which means "plank wood." It grows to about twelve inches in diameter and fourteen feet in height. It is soft and light, and is used by the natives for country vessels and catamarans. This wood, and all the light jungle woods, are of little value, in consequence of their early and rapid decay.—*Edye, Forests of Malabar and Canara.*

PALM TREE WOODS. Notices of the palm woods will be found under the names of their respective trees, the principal of which are the Areca catechu ; Borassus flabelliformis ; species of Calamus ; Cocos nucifera ; species of Corypha, the Nipa fructicans, many products of which —their woods, leaves and fruits—are largely used in India ; palm woods are sparingly employed in England for cabinet and marquetry work, but sometimes for billard cues which are considered to stand remarkably well ; they are also turned into snuff-boxes, &c. The smaller kinds are imported under the names of Partridge canes (called, also Chinese or fishing canes), also as Penang canes from the island of Penang, together with some other small palms which are used for walking-sticks, the roots serving to form the knobs or handles. The knobs of these sticks exhibit irregular dots something like the scales of snakes, these arise from the small roots proceeding from the principal stem ; which latter shows dotted fibres at each end of the stick, and streaks along the side of the same. The twisted palm sticks, are the central stems or midribs of the date palm ; they are twisted when green, and stretched with heavy weights until they are thoroughly dry : they are imported from the Neapolitan coast, but are believed to be produced in Egypt. The shells of the cocoa-nut and coquilla-nut, and the kernels of the areca or betel-nut, and those of the corosos or ivory-nut, have likewise their uses in English workshops. But, only two or three varieties of the several hundred species are imported into Great Britain from the East and West Indies. They are known in England by the names, palm, palmetto, palmyra and nutmeg, leopard, and porcupine wood, &c., from their fancied resemblances ; for, when they are cut horizontally, they exhibit dots like the spice ; and when obliquely, the markings assimilate to the quills of the porcupine. The trunks of palms are not considered by physiological botanists to be true wood, they are all endogenes, and all grow from within, and are always soft and spongy in the centre, but are gradually harder towards the outside : they do not possess the medullary rays of the proper woods, but only the vertical fibres, which are held together by a much softer substance like pith or cement, so that the horizontal section is always dotted, by which they may be readily distinguished from all true woods. The colours and hardness of the two parts differ very materially.—*Tredgold.*

PANDAN, HIND. ? A tree of Chota Nagpore, furnishing a hard, red timber.—*Cal. Cat. Ex.* 1862.

CSL

PANDOR, Hind.? A tree of Chota Nagpore, with a soft, white wood.—*Cal. Cat. Ex.* 1862.

PANEEOLLO, Uria. A tree in Ganjam and Goomsur, of extreme height 40 feet, circumference 2 feet and height from the ground to the intersection of the first branch, 8 feet. Tolerably common and burnt for firewood. The bark is used medicinally.—*Captain Macdonald.*

PA-NGAN, Burm. A compact white wood of Amherst, used for boats and oars, and for making musical instruments.—*Captain Dance.* (It seems to be Gmelina arborea).

PANICHIE. The Tamil and Portuguese name of a tree which grows in Ceylon and Travancore. In Ceylon it grows tall and straight, from thirty to sixty feet high, and ten to twenty-four inches in diameter. In Travancore it is not more than twenty feet high, and is curved. It produces a fruit which resembles externally the small russet apple : when pressed it yields a very glutinous juice, which is used as a substitute for glue ; and may be considered in that country as very superior to glue for the use of joiners. In Ceylon, this tree is converted into masts, yards, &c., for country vessels ; and the native carpenters consider it the best sort of all the jungle woods for that purpose.—*Edye on the Timber of Ceylon.* (*Note.*—This seems to be the Diospyros embryopteris.—*Pearson.*)

PANJAB WOODS have been largely described by Dr. J. L. Stewart, Conservator of Forests ; by Lieut.-Colonel Lake, Commissioner, Jhullundhur Division ; by Mr. Powell in his Hand-book of the Panjab, quoting Dr. H Cleghorn's Report of the Jury on Woods at the Panjab Exhibition of 1864. The trees commonly seen in the plains of the Panjab or near hill-ranges are the kikar (A. arabica), the beri (Z. jujuba), the siras (A. serissa), the shisham (D. sissoo), the mulberry (Morus indica, &c.) In Lahore and in the Southern districts, clumps of the wild palm, Elate sylvestris, are met with and produce a pleasing effect, At Madhohúr, the casuarina and the eucalyptus have flourished wonderfully ; the tún (cedrela toona), a valuable tree, grows along the canals, and ought to be very largely cultivated. The Eucalyptus thrives well, almost everywhere, but it frequently dies when young, or if it get too much water during the rains ; combined heat and great moisture it cannot stand. Ailanthes excelsa, that magnificent tree, bids fair to be introduced ; as well as the carob bean (Ceratonia siliqua), and some of the Salt Range trees, tecomia, box, olive, &c., are being tried. Tracts of "*rakh,*" or waste land, are to be met with in portions of many districts in the Panjab ; in the Lahore district there are no less than 86 such tracts, consisting of plots of uncultivated ground ; the total area is 2,50,000 acres, but all of this does not yield wood—a great deal is grazing ground, much of which is quite capable of being brought under cultivation. The great value of the wood bearing rakhs consists in their being the source from which all the fuel for railway consumption is to be taken. The trees most commonly met with in "rakhs" are the jhand (kundi in Sindh), Prosopis spicigera. This is the best fuel wood, being heavy and compact, and burns slowly : when staked it is liable to be attacked by white ants. The Phuláhí (Acacia modesta) is not found in the southern district. The Palas or Dhak (butea frondosa), in Amritsur, and also east, but not in the south. Karil (capparis aphylla,) the leafless caper, will burn while green and gives out great heat ; but otherwise is not esteemed as a fuel plant. Jál or vánr—(Salvadora oleoides) is a bad fuel, quite useless for locomotives, but can be used for steamers. Salvadora indica also occurs in the south, it is called "kaura vari." Of the Tamarisk, three species occur, farwá, farás, or ukhán. Tamarix orientalis grows easily and rapidly to a large tree ; it is resinous and is a good fuel, but emits a bad smell in burning. The laī (or Tamarix indica is a large shrub; and chilchi (T. dioica), is a small shrub with wood, fit for basket work, &c. : it grows by the sides of rivers, &c. Bhán (Populus Euphratica,) is abundant in the south, but the wood is light, and while burning throws out sparks or burning flakes which endanger steam boats. Mallan (Zizyphus nummularia), is very common, but only used for fodder ; it has no wood to speak of. Dr. Stewart gives in his list as rarer in "rakhs," Acacia arabica, A. eburnea (labur). Dalbergia sissoo, Zizyphus jujuba, and kangu (Lycium Europeum).

In the most eastern portion of the Panjab territories, there are forest tracts in the valleys of the Gírí, Tonse and Pábar rivers, which flow into the Jumna. These valleys adjoin the district of Garhwal, in which deodar forests are in abundance : in the valleys themselves, there appear to be detached forests of deodar, and some of "kail" (Pinus excelsa), while, lower, there are forests of "Chil" (Pinus longifolia), or "sulli" as it is called in Garhwal. These rivers are all rapid in their course, and have rocky beds : the angles they flow are often considerable, and they are generally practicable only for logs of sleeper, or other short, lengths. The *Tonse* river is under the Garhwal and Dehra-dhoon authorities: the *Pábar* and the *Gíri* run through Bashahir and Sirmoor, respectively : there is but little deodar in the upper valleys, the streams are rapid and the volume of water scanty. The interior hills of *Bashahir* are still covered with the finest forests of deodars : at Nachar, in this territory, the size of the tree is immense. The photographs of Messrs. Shepherd and Bourne have made many readers familiar with some of these trees : one great tree, which divides into two trunks afterwards, is 36 feet in circumference.* Many cedars may be seen over 20 feet in girth, and from 100 to 150 feet high. The *Sutlej* river is very furious and has a rocky bed : but, on the whole, the difficulties of floating timber are not insuperable : rafts cannot be constructed above Bilaspúr. The *Beas* river rises in a sacred pool, called "Vyás Rikhi" in the Rotang pass, at the head of the Kúlú valley. The scenery of the river valley is very beautiful, and is unlike that of the Chenab or Sutlej. The river is fringed with trees and studded with green islands. There is a good riding path close along the bank which does not exist upon any other river in the Panjab. Besides deodar in the upper Beas valley, "kail" (Pinus excelsa), elm, maple, oak and walnut are abundant. On the Parbati box occurs ; also olive and the twisted cypress (Cupressus torulosa) are found in small quantity. The *Ravi* is the smallest and most rapid of the Panjab rivers. It rises in British territory in the taluka of Bara Bungahal : its course in the hills is for 130 miles, and the average fall for this portion is 115 feet per mile. Near the head there is not much timber, a good deal having been felled in past times, and the rest consists of trees immature or inconveniently situated. The principal tributaries are the Budhil, the Tuna, the Seul and the Siawa. On the first is situated Barmawar, at which place there are a few fine deodars. The *Chenab* is, next to Sutlej, the largest and longest of the rivers. In physical features the valley of this river resembles that of the Sutlej. Both rivers rise in arid regions and flow between lofty ranges of mountains, generally rocky and precipitous, but often finely wooded. The *Jhilam*, a large portion of the course of this river is through the foreign territory of Kashmir, flowing out from the valley through the Pir Panjal range, at the Baramula pass, and first touching British territory at Pattan. The snow on the Kaghan heights melts in March, and the river acquires volume in April : the full flood lasts from May till July. The finest submontane forest tract in the *Eastern Panjab Himalaya* is the remnant of a once far more extensive tract of "sál" at Kalesar, in the Ambalah district. The forest is on the extreme north-east corner of the district in a fork of the Siwalik, on the right bank of the Jumna, opposite the Khárá head of the Eastern Jumna Canal, and about 3 miles above the head of the Western Jumna Canal at Haturkhund. There are patches of "sál" in *Kangra* and *Hushyarpur*, but the tree here attains its western limit, and has not been seen across the Rávi. Thal districts are of greater or less extent in the various districts of the Panjab, and some of them chiefly valuable for the grazing they yield to large herds of cattle, who pay the "tirní" or grazing tax to Government. The following is the list by Dr. H. Cleghorn, Reporter to the Juries (in Powell's Handbook, Econ. Prod., Panjab, pp. 526 to 532) ; and those with an asterisk are named by Dr. J. L. Stewart to be the chief timber trees of the Province :—

Abelia triflora
Abies Smithiana
Acacia Arabica*
,, cupressiformis
,, catechu*
,, eburnea
,, elata*
,, farnesiana
,, julibrissin.
,, leucophlœa
,, modesta*
,, Jacquemontii
,, sirissa
,, speciosa, *var.* mollis*
,, stipulata
Acer cultratum*
,, sterculiaceum
,, lævigatum
,, caudatum
Adelia serrata
Adhatoda vasica
Ægle marmelos*
Albizzia odoratissima*
Alnus Nepalensis
Amygdalus Persica
Andromeda ovalifolia
Armeniaca vulgaris.
Artocarpus integrifolia
Arundinaria utilis
,, falcata
Azadirachta Indica*
Balanites Ægyptiaca
Bambusa stricta
,, arundinacea
Bassia latifolia*
Bauhinia acuminata
,, variegata
,, *var.* purpurea
,, variegata
Benthamia fragifera
Berberis aristata and other species
Betula bhojputra*
Bergera Kœnigii
Bignonia suaveolens*
,, Indica (calosanthes Indica)
,, suberosa
Bombax heptaphyllum*
Boswellia glabra
Buddleia crispa
Buchanania latifolia
Butea frondosa
Buxus sempervirens
Cæsalpinia sepiaria
Calotropis procera
Callicarpa incana
Calligonum polygonoides
Capparis aphylla*
,, spinosa
Careya arborea
Carissa diffusa
,, edulis
Carpinus viminea*
Casearia tomentosa
Cassia fistula
Casuarina equisitefolia
Cedrela toona*
,, *var* serrata*
Cedrus deodara*
Celastrus spin
Celastrus parviflora
Celtis caucasia
,, eriocarpa
,, Nepalensis
Cerasus (Prunus) puddum
,, (,, padus) cornuta
Cinnamomum albiflorum
Citrus aurantium
Colebrookia oppositifolia
Conocarpus latifolia*
Cordia augustifolia (sub-oppositifolia)
,, myxa
,, Macleodii
Coriaria Nepalensis
Cornus macrophylla
,, oblonga
Corylus lacera
,, colurna
Cotoneaster baccillaris
,, rotundifolia
,, obtusa
Cratægus crenulata
,, oxyacantha
Cratæva religiosa
Cupressus sempervirens
,, torulosa
Cydonia vulgaris
Dalbergia Ougeinensis (Ougeinia dalbergioides)
,, robusta
Dalbergia sissoo*
Daphne oleoides
Desmodium tiliæfolium
,, argenteum
,, *sp.*
Deutzia stamina
Diospyros lanceolata
,, lotus
,, montana
,, tomentosa
Dodonæa Burmannia
Ehretia aspera*
,, serrata*
Eleagnus conferta
Elæodendron Roxburghii*
Emblica officinalis*
Erythrina stricta
Eriobotrya japonica
Euphorbia Royleana
Euonymus fimbriata or E. Hamiltonii
Eucalyptus, several species
Falconeria insignis
Feronia elephantum
Ficus caricoides
,, glomerata
,, Indica
,, oppositifolia
,, Roxburghii (macrophylla)
,, religiosa
,, venosa
Flacourtia sapida
,, sepiaria
Fluggea virosa*
Fothergilla involucrata (Parrotia Jacquemontiana)
Fraxinus floribunda*
,, xanthoxyloides
Gardenia tetrasperma

GSL

Garuga pinnata
Gleditschia triacanthus
Gmelina arborea*
Grewia asiatica
,, betulæfolia
,, elastica*
,, oppositifolia
,, Rothii
Grislea tomentosa
Gymnosporia spinosa (Celastrus spinosus)
Gynaion vestitum (Cordia vestita
Helicteres isora
Hippophae salicifolia
Holarrhena antidysenterica
Hymenodictyon excelsa
Hyperanthera pterygosperma (Moringa pter.)
Ilex dipyrena
Indigofera arborea
Jatropha curcas
Juglans regia*
Juniperus excelsa(J.arborea)*
,, communis
,, squamosa
Kydia calycina
Lagerstræmia parviflora*
Lawsonia inermis
Lonicera quinquelocularis
Lycium Europæum (or L. Edgeworthii
Mangifera Indica*
Marlea begonifolia
Melia azederach*
Melia sempervirens
Michelia champaca*
Mimosa rubicaulis
Mimusops elengi
,, kauki
Morus alba*
,, lævigata
,, sinensis
,, parviflora
,, serrata
Myrica sapida
Myricaria sp. (qu. M. Germanica)
Nauclea cordifolia
,, parviflora
Nerium odorum
Nusslessya hypoleuca (Boehmeria salicifolia)
Nyctanthes arbor-tristis
Odina wodier*
Olea Europæa*
,, ferruginea (*Royle*)
,, cuspidata
Ougenia dalbergioides
Paliurus aculeata
Parkinsonia aculeata
Pavia Indica*
Pentaptera tomentosa*
Phœnix sylvestris
Picea Webbiana (P. pindros)
Pinus excelsa*
,, Gerardiana
,, longifolia*
Pistacia integerrima*
,, terebinthus
Platanus orientalis*
Poinciana regia
Pongamia glabra
Populus alba
,, balsamifera
,, Euphratica
,, fastigiata
Premna arborea
,, mucronata*
Prinsepia utilis
Prosopis spicigera (P. Stephaniana)
Prunus doméstica
,, insitita
,, padus
Psidium pyriferum
Pterospermum acerifolium
Punica granatum
Putranjiva Roxburghii
Pyrus acuparia
,, baccata
,, communis
Pyrus Kumaonensis
,, malus
,, variolosa
Quercus annulata
,, dilatata*
,, ilex
,, incana
,, semecarpifolia*
,, floribunda
Randia (longispina?)
,, dumetorum
Reptonia buxifolia
Rhamnus virgatus (Persica)
,, purpureus
Rhododendron arboreum
,, caupanulatum
,, lepidotum
Rhus acuminata
,, cotinus
,, parviflora
,, semialata (R. buckiamela)
Ricinus communis
Ribes nubicola, glacialis, grossularia
Roylea elegans
Rosa Brunoniana
,, eglanteria
,, macrophylla
,, Webbiana
Robinia macrophylla
Rottlera tinctoria
Rubus fruticosa
,, flavus
,, purpureus
,, lasiocarpus
Sageretia oppositifolia
,, Brandrethiana
Salix Babylonica
,, alba
,, caprea (Ægyptiaca)
,, tetrasperma
,, *species*
Salvadora oleoides
,, Persica
Sapindus acuminatus
,, detergens*
Schleichera trijuga*
Semecarpus anacardium
Sesbania Ægyptiaca
Spiræa Lindleyana
,, hypoleuca
,, callusa
Sponia Wightii
Spondias mangifera
Staphylea emodi
Stillingia sebifera
Symplocos paniculata
,, racemosa
Syringa emodi
Syzygium jambolanum
Sterculia Roxburghii
,, villosa
Tamarindus Indica*
Tamarix dioica
,, gallica (Syn. Indica)
,, orientalis*
Taxus baccata*
Tecoma undulata
Tectona grandis*
Terminalia bellerica
,, chebula
,, arjuna*
Tetranthera Roxburghii
Trophis aspera
Ulmus campestris*
,, erosa*
,, virgata
,, integrifolia*
Vatica robusta*
Viburnum fœtens*
,, continifolium*
,, stellulatum*
Vitex negundo
Vitis vinifera
Wrightea mollissima
,, tinctoria
Xanthoxylum hostile
Zizyphus jujuba
,, vulgaris
,, nummularia
,, flexuosa

—*Drs. Cleghorn, and J. L. Stewart, Mr. Powell, Hand Book of the Panjab, pp.* 5 *to* 532.

PAN-LOUN. In Tavoy a close-grained red wood: used for building.—*Dr. Wallich.*

PANOON. A large tree of Lucknow, grows spontaneously in the Tarai, its large timber is used for beams, &c.—*Cal. Cat. Ex.* 1862.

PAN-THEET-YA. In Tavoy, a good, white, rough wood; useful for boat-building.—*Dr. Wallich.*

PAPISRANG. From Penang, are two notices of woods of this name, viz.:

Papisrang, purple colour. A strong wood; used for beams.

Papisrang, wood of a pale brown colour. Six to nine feet in circumference, forty feet long; not good for beams; chiefly used for furniture.—*Colonel Frith.*

PARAMIGNYA CITRIFOLIA, *Wight.*

Limonia citrifolia, *Roxb. Fl. In.* | Pamburoo. Singh.

According to Mr. Mendis, a tree of the southern province of Ceylon, the timber of which is used in house-building, &c. When variegated it is a beautiful wood, and is used for furniture and cabinet work, buoys for fishing nets, &c. A cubic foot weighs 48 lbs., and it is calculated to last 40 years.—*Mr. Mendis.*

PARAN-THA, Burm. A tree of Moulmein. Its wood is soft and used for ordinary purposes as a building material.—*Cal. Cat. Ex.* 1862.

PARANYAN? Champac? A tree of Akyab, which grows to a moderate size, and is procurable in the Sandoway district. Wood used as planking.—*Cal. Cat. Ex.* 1862.

PARATY MARAM, the Tamil name of a Malabar and Canara tree. It grows to about twelve inches in diameter, and twelve feet long, and produces a nut which the natives eat, and on which wild animals feed. It is not of much value.—*Edye, Forests of Malabar and Canara.*

PA-RA-WA. In Amherst, a hard, red, compact wood, with large fibre, and fit for gun-carriages or other similar purposes. It is exempt from attacks of insects. It is used for spears and arrows. (*See* Parrawa: are they identical and a species of Garcinia?)

PARCUTILLE. The Tamil name of a tree which grows to about twenty-four inches in diameter, and fifteen feet in height. It is used by the natives in boats, houses, and other works: it is not of great value.—*Edye on the Timber of Ceylon.*

PARITIUM TILIACEUM, *Ad. Juss.*

Hibiscus tortuosus. | H. tiliaceus
Belli-pata. Singh.

Grows in India, and the Moluccas, used chiefly for fences and the fibre of its bark.—*Mr. Fergusson, Voigt,* 120.

PARKIA BIGLANDULOSA, *W. & A.*

Mimosa pedunculata, *Roxb.*

Chendu phul. Hind.

Sambrani manu. Tel.

A very elegant tree of the Malay Archipelago: but grown in India. The Malays are said to be fond of the mealy matter which surrounds the seeds, and of the seeds themselves which taste like garlic. The flower buds resemble balls of red velvet; wood is of fair quality.—*Voigt, Dr. Riddell.*

PARKIA BIGLOBOSA. A very elegant tree of large size, introduced from Africa, the legumes are filled with a farinaceous pulp, the wood is hard and promising, but a supply of timber is not yet procurable. It is surrounded by an astrigent bark from which a watery extract has been prepared, the value of which for tanning purposes has yet to be tested.—*Dr. Cleghorn in M. E. J. R.*

PARKIA ROXBURGHII, *G. Don.*

Mimosa biglobosa, *Roxb.*

A tree of Assam and Sylhet, wood not known.—*Voigt.* (*Note.*—Are the last two identical?)

PARKINSONIA ACULEATA, *Linn.; W. & A.*

Barbadoes flower fence. Eng.

Jerusalem thorn. ,,

Genet epineux. Fr.

Wilaiti kikar of the Panj.

Sima jiluga. Tel.

A small graceful tree, with large yellow flowers, of the West Indies and South America domesticated in India. It grows 12 or 15 feet high and is seen everywhere in hedges of the Peninsula, springing up with less care than any other tree, is valuable for hedges, and furnishing abundant cuttings for fuel. A useful fibre is obtained from its stem, valuable as a paper material.—*Voigt, Drs. Riddell, Royle, Eng. Cyc.*

PARRAWAII, Burm. A timber of Amherst, Tavoy and Mergui, abundant all over Tenasserim and Martaban provinces; of maximum girth 3 cubits and maximum length 22 feet. When seasoned it sinks in water. It is a durable smooth-grained tough wood; used by Burmese for sticks, helves for pick-axes and hoes, handles of chisels and other tools, &c. Recommended for helves and handles of tools generally.—*Captain Dance.* (*Note.*—See Pa-ra-wa. Is this a Garcinia?)

PARSI, Hind.? A tree of Chota Nagpore with hard red timber.—*Cal. Cat. Ex.* 1862. See Phasee.

PASA LINIJA, A Penang wood of a light brown colour. A large tree, used only for planks: soon decays.—*Col. Frith.*

PASELAY, Tam. A Tinnevelly wood of a whity brown colour. Used for furniture *Col. Frith.*

PATAJUN. A Panjab tree of moderate size, the length of trunk to first branch 12 feet, and girth 5 feet. Wood white, hard, not very heavy, strong and durable, close-grained, used for zemindars' houses and agricultural implements. Leaves used as fodder, and the fruit used by brahmins as necklaces.—*Lieut. Col. Lake, Commissioner, Jhullundhur Division.*

PATKEALE. A tree of the western parts of Ceylon, a cubic foot of its wood weighs 42 lbs., and it lasts 40 years. It is used for common house-building.—*Mr. Mendis.*

PATONWA, Uria. Gardenia, *Species??* A tree of Ganjam and Goomsur, extreme height 20 feet, circumference 1 foot, and height from ground to the intersection of the first branch, 5 feet. Used chiefly for firewood being tolerably common. The fruit thrown into a pond of water kills all the fish in it, and is used for that purpose by the keyout or fishermen. This mode of catching fish is designated "Macho Mohneebaro." The fruit is said to be poisonous, but the seeds are used medicinally for fever.—*Capt. Macdonald.*

PATTI VAYNGU (which means dog-wood), the Malayala name, in Malabar and Canara of one of the inferior sorts of jungle wood: it is considered of little use or value.—*Edye, Forests of Malabar and Canara.*

PATSENG-NGO, Burm.? In Tavoy, a superior high-coloured aromatic wood, like mahogany.—*Mr. Blundell.*

PAULAY, Tam. In Tinnevelly, a wood of a deep straw colour. Fancy work.—*Col. Frith.* (Major Beddome says this is Alstonia.)

PAULGHAT WOODS. Colonel Frith notices the following woods in this district:

Ab Eney.
Bumboo.
Benteak.
Cedar.
Cedar-root.
Cautovanga.
Chadachey.
Eroopoottooirvolly.
Ittee veittee.
Kullen teak.
Kurroovalagom.
Kurroomardoo.
Kurroongaulee.
Muroodoo.
Nova.
Oomo teak.
Oodoogoo.
Portia.
Teak.
Vangay.

PAUL-TEAK, Tam. In Travancore, a wood of a brown colour, specific gravity 0·739. Used for furniture, gun-carriages, &c.—*Col. Frith.*

PAUSEE. In Kimedy, a tree 60 feet in height, 5 feet in circumference and 30 feet to the first branch: furnishing a light hard wood, used to make presses, wheels, &c.—*Captain Philipps.* See Phasee.

PAVETTA INDICA, *Linn.*

Ixora paniculata, *Lam.*

Ixora pavetta, *Roxb.*

Kookoor choora. Beng.

Pavetta. Singh.

Pavetti. Tam.

Abundant all over India, timber very small.—*Roxb.* i, 385, *Thw., Voigt, M. E. J. R.*

[illegible]VETTA TOMENTOSA.

Papirree, Tel.
Papatta, Tel.

Wood hard but very small. It grows all over India.—*Roxb.* i, 386, *Captain Beddome, Dr. Mason.*

PAVIA INDICA, *Royle., Il. ; Him. Bot.*

Jauz makaddam. Ar. (the fruit.)
Himalayan chesnut. Eng.
Horse chesnut. ,,
Indian ,, ,,
Knor : kanor ; kanur. Hind. of Beas and Sutlej.
Kunour. Hind.
Pangla. ,,
Ban-khor. Hind. of Jhullundhur.
Ban-akhrot. Hind.
Gun. Panjab, Chenab and Ravi.
Gugu. Panjab, Chenab and Ravi.
Hane of Kangra.
Hanudan of ,, Chenab.
Tor jagga of Trans-Indus.

This is a very large lofty tree, not less ornamental than the English horse-chesnut, and attains a girth up to 10 to 15 feet. It grows on the mountains of Kumaon, Gurhwal, Sirmore and Kanawar, also near the sources of the Ganges and on the higher hills, Cis- and Trans-Indus, at elevations of 4,000 to 9,000 feet. The wood is soft but strong ; is of a white or light colour, veined, fine-grained, easily worked and polishes well. It is used for ordinary building and cabinet purposes, for packing cases, water troughs, tea boxes, and rough pattern making, and some of the Thibetan drinking cups are made from it. The seed contains a large proportion of fecula, and though combined with some bitter principle, is eaten in the Himalayas.—*Royle's Illustr. Him. Bot., p.* 135, *Lieut.-Col. Lake, Dr. J. L. Stewart, Voigt*, 97.

PEE-DAUP, Burm. Mimosa, *Species.* A wood of Tavoy.—*Dr. Wallich.*

PEEDOO MARAM, Tam. A small tree in Wynaad, where it grows plentifully ; wood used for building.

PEE MA PEW, Burm. White Peema, Eng. A tree of maximum girth 6 cubits and maximum length 30 feet. Very abundant all over the Tenasserim and Martaban provinces near the red Peema. When seasoned it floats in water. It is a tough wood, lighter than, but does not last for so long a time as, Red Peema, and rots in any position when shut out, as in the hulls of ships, in store, &c.—*Captain Dance.* (*Note*—Is this Lagerstrœmia reginæ ?)

PEGU TIMBER TREES, TIMBER AND FANCY-WOODS. The forests of Pegu and their timbers have been described by Drs. Mason, Falconer, McClelland and Brandis. Timber for ordinary purposes is most plentiful throughout all parts of the southern forests. Dr. McClelland noticing 76 timbers of these forests generally, says of the

White Woods.—Eighty-five species are soft and useless, being only fit for fuel. Many of them however are valuable, either for their fruit, gums, oil-seeds or spices ; others, for their close and compact structure, are employed in the manufacture of small ware, as a species of *Nauclea* is used for making combs, and two species of *Erythrina* yields the light charcoal employed in the manufacture of gunpowder.

These light woods, useless as timber, belong to the families of *Urticaceæ* (including more than twenty species of *Ficus*,) and *Sterculiaceæ*, *Laurineæ*, *Rubiaceæ*, *Myristicaceæ*, *Anonaceæ*, *Spondiaceæ* and *Bignoniaceæ*, with odd species from other families.

The remaining white woods, twenty-five in number, are valuable for their strength and closeness of grain. Seventeen of these are fit for house-building, viz :—

(1) Hibiscus macrophylla.
Kydia calycina.
Eriolæna tilifolia.
Connarus speciosa.
Grewia floribunda.
Grewia spectabilis.
,, Hookerii.
Sapindus rubiginosa.
Millingtonia simplicifolia.
Sandoricum Indicum.
(10) Amoora (Aglaia) rohituca.
Juglans tricocca.
Geloxium bifarium.
Excæcaria agallocha.
Walsura piscidia.
Canarium geniculatum.
Indigofera, *sp.*
Terminalia belerica.
,, violata.

And eight, from the hardness and fineness of their grain, are valuable as fancy woods for cabinet-making, viz :—

(18) Semecarpus anacardium.
Sibia, *sp*, (glomerata.)
Casuaria pentandra.
Chaulmoogra odorata.
Strychnos nux-vomica.
Conocarpus robustus.
Bauhinia parviflora,
,, brachycarpa.
(25) Elæodendron integrifolia.

Red-coloured Woods.—These are twenty-five in number, seven of which, from their strength and solidity, are adapted for the various purposes of house-building, viz:—

(26) Heritiera minor.
,, litoralis.
Eugenia pulchella.
E. myrtifolia.
E. vulgaris.
E. ternifolia and E. jambolana.
Sonneratia apetala.
Terminalia chebula.
Lagerstræmia pymmah.
Aglaia spectabilis.
(32) Ulmus alternifolius
Ulmus integrifolius.

Seven, from the elegance of their grain and colour, are suited to the various purposes of which mahogany is used, viz :—

(33) Cedrela toona.
Swietenia chikrassa.
Armosia dasycarpa.
Pterocarpus dalbergioides.
Careya arborea.
Barringtonia acutangula and B. speciosa.
Castanea Indica.

And eleven are suited to the finer purposes of fancy cabinet work, viz :—

(40) Adenanthera pavonina.
Calophyllum longifolium.
Dalichampia pomifera.
Pygeum acuminata.
Photinia serratifolia.
Acacia stipulata.
Acacia catechu.
Acacia serissa.
Acacia elata.
Ricinus dicocca.
Antidesma paniculata.

Yellow Woods.—These are four in number, hard and fine grained, and suited to fancy purposes :—

(51) Gmelina arborea,
Morinda bracteata.
Morinda exserta.
Garcinia cowa.

Dark-brown Woods.—These are twelve in number and are all valuable. Eleven are adapted for house-building, and probably for ship-building and one for special purposes requiring great strength and hardness :—

(54) Pterospermum aceroides, also P. subacerifolium and P. acerifolium.
Pentaptera arjuna and P. glabra.
Melanorrhœa usitata Theetsee or Lignum vitæ.
Dalichampia pomifera.
Butea frondosa.
Mangifera attenuata.
Anacardium occidentale.
Zizyphus jujuba.
Averrhoa carambola.
Pierardia sapota.
Ancestrolobus carnea and A. mollis.
Rondeletia tinctoria.

Black Woods.—These consist of four different kinds, all of which are valuable for their strength and hardness :—

(66) Dalbergia, *Species.*
Cassia Sumatrana.
Inga xylocarpa, and I. bijemina.
Diospyros melanoxylon.

Light brown Woods.—There are nine varieties of this coloured wood, embracing all the timber of most value in the Province, exclusive of Teak.

(70) Dipterocarpus alatus.
Dipterocarpus turbinatus.
Shorea robusta.
Melicocca trijuga.
Dillenia augusta, also D. scabra and D. speciosa.
Hopea odorata.
Azadarachta Indica.

The above list embraces all the useful timber found in the forests of the Pegu province, except teak. Besides timber well adapted for house-building, the list contains several promising kinds that have never yet been fairly tried for ship-building, and which, in point of strength, are equal to teak or oak. The timbers referred to more especially are, *Melicocca trijuga, Inga xylocarpa and I. bijemina: Pterospermum aceroides: Pt. subacerifolium and Pt. acerifolium: Pentaptera arjuna and P. glabra: Lagerstrœmia pymmah: Careya arborea: Elæodendron integrifolia: Conocarpus robustus: Sibia, sp.: and Connarus speciosa*, Nos. 73, 68, 54, 55, 30 and 37, Nos. 25, 23, 19, 14, and 4 are also deserving of trial for ship-building, and No. 56 for any special purposes, where great strength and density are required. Until these trials be decided, the timber employed for house-building purposes should be restricted to other kinds. The following are the trees which may be had, in the Southern forests, of any size and to any extent :—

Sapindus acuminata.
Odina wodier.
Dillenia augusta.
Dillenia scabra.
Blackwellia spiralis.
Blackwellia perpinqua.
Cluytia amœna.
Bombax pentandra.
Connarus, *species*.
Nauclea parviflora
Nauclea cordifolia.
Nauclea undulata.
Nauclea cadamba.
Uvaria ventricosa.
Bignonia spathodea.
Bignonia coronaria.
Bignonia adenophylla.
Sterculia alata.
Sterculia ornata.
Sterculia ramosa.
Sterculia foetida.
Sterculia balangas.
Sterculia guttata.
Ricinus dicocca.
Artocarpus incisa.
Artocarpus liquosa?
Sandoricum indicum.
Pentaptera glabra.
Pentaptera arjuna.
Diospyros melanoxylon.
Terminalia bellerica.
Terminalia scævola.
Hibiscus macrophylla.
Grewia floribunda.
Ficus macrophylla.
Ficus lanceolaria.
Ficus congesta.
Ficus glomerata.
Ficus cordifolia.
Ficus nitida.
Ficus urophylla
Ficus pisifera.
Ficus bifaria.
Ficus mamilaris.
Ficus oppositifolia.
Kydia calycina.
Eliodendron, *species*.
Celtis tetranthera.
Grewia nudiflora.
Strychnos nux vomica.
Garcinia cowa.
Dipterocarpus turbinatus
Dipterocarpus alatus.
Walsura piscidia.
Waltheria velutina.
Macrochlœna spectabilis.
Dalbergia robusta.
Dalbergia frondosa.
Lagerstrœmia pymmah.

—*Dr. McClelland in India Selections No. IX.* *See* AKYAB, AMHERST, ARAKAN, BURMAH, MOULMEIN, PEGU, PROME, TENASSERIM.

PENANG. This beautiful island has been largely bared of trees, in the progress of agriculture. About the year 1830, the late Lt.-Col. Frith of the Madras Artillery gave a list of 42 of its woods under their native names with short descriptions of them. These will be found in the alphabetical arrangement: 18 woods were sent to the Great Exhibition of 1851, and 45 to that of 1862.

42 *Woods of Penang by Colonel Frith.*

Brantey.
Bunho.
Bintagor.
Curupas.
Cooran.
Chinjeritt.
Cumpas.
Cawa-Arang.
Canis.
Chiuracy.
Cocoa-nut.
China red wood.
Ceylon ebony.
Damarlout.
Dunorhung.
Drum.
Hama Raja.
MaddangKamenhir.
Miraban.
Middang Tandack.
Maskaw.
Mankadu.
Maliler.
Maribot.
Mandara.
Nebong.
Pasa Linija.
Pala.
Pinang Bach.
Pala Utan.
Papisrang.
Penang Teak.
Penang Jack.
Rangha.
Rokam.
Red wood.
Sankuang.
Satin wood.
Siam ebony.
Teak.
Tampinnis.
Tija.

The following 18 furniture woods, grown in Penang, were sent to the Exhibition of 1851 :—

1. Angsena, or Senna Baymah.
2. Baloh Bunga.
3. Kulim.
4. Baloh Bunga.
5. Betel-nut tree root.
6. Clove tree.
7. Cocoa-nut tree root.
8. Durian (wild).
9. Eboeh-tree root.
10. Ebony.
11. Guava wood.
12. Ibool wood.
13. Kamuning.
14. Baloh.
15. Mirlimoh.
16. Penang Wood.
17. Ranggas.
18. Siam Wood.
19. Timbusi.

Penang woods sent to the Exhibition of 1862 :—

Ahtow.
Bahkoh.
Bayor.
Bayang Bada.
Bea-babi.
Bintaling.
Brangan.
Champada.
Champadah Ayer
Dammar laut.
Gading-gading.
Gaham.
Jelatoh.
Jermalang.
Jong-puslis.
Jelutong.
Juntangmalah.
Jurai.
Kampas.
Kampas.
Klat.
Koolin.
Madang-serai.
Macepaste.
Mungkodu.
Murbow.
Naugka.
Nangka pipet.
Pisang-pisang.
Pulai.
Rungas.
Sittola.
Tampinch.
Tumpang.
Tumusu.

Many of these various names may be synonyms.

PENANG JACK. Wood of a yellow colour. Used only for ornamental furniture. —*Col. Frith.*

PENARU PALAM MARAM, the Malayala name of a Malabar tree. It is used at times by the natives, but is of little value.—*Edye, Forests of Malabar and Canara.*

PENEBARROO, SINGH. A wood of the eastern province of Ceylon. A cubic foot weighs lbs. 61, and it is said to last 50 to 90 years. It is used for rafters, &c. Fences made of the sticks of this tree are most durable.—*Mr. Mendis.*

PENG-LAY-BYUN, BURM. A small-sized tough wood of Tavoy.—*Mr. Blundell.*

PENG-LAY-KABOAY, BURM. In Tavoy a heavy small-sized wood; suitable for hand-spikes, handles, &c.—*Mr. Blundell.*

PENG-LAY-OUN, BURM. In Amherst, a timber used for spear handles: it is a most valuable wood, compact, homogeneous, very

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heavy, of a deep-brown colour and fine grain, having no tendency to split, and exempt from attacks of insects.—*Cat. Ex.* 1851.

PENG-LAY-OUN, BURM. In Tavoy, strong, rough, red wood, like Mimosa serissa. —*Mr. Blundell.*

PEN-LAY-PEEN, BURM. A Tavoy wood, used in building.—*Dr. Wallich.*

PERJI, the Malayala name of a tree which grows in the forests of Malabar and Canara to about twelve feet in height, and ten inches in diameter. Its wood is very hard and strong, and used by the natives for knees and boat timbers; and is ranked among the jungle-woods of the coast.—*Edye, Forests of Malabar and Canara.*

PERRA MARA in Malayala, Coia Maram in Tamil, are the names of a tree that produces the guava fruit. This tree grows to about twelve or eighteen feet high, and eight inches in diameter; its wood is very hard and close-grained. It is used, in conjunction with the jungle-woods, for inferior purposes, but is generally known as a garden fruit tree.—*Edye, Forests of Malabar and Canara.* (*Note.*—Psidium pyriferum.)

PET-THAN, BURM. A tree, abundant in Tavoy and Mergui, not procurable in Moulmein. When seasoned it sinks in water. Maximum girth and length not ascertained. A very hard and durable wood, used by Burmese for wedges.—*Captain Dance.*

PEW-BOCK, BURM. A tree of maximum girth 3 cubits, maximum length of 25 feet. Very abundant along the sea coast near Tavoy and Mergui. When seasoned it sinks in water. It is a strong, tough, durable wood; recommended for helves.—*Captain Dance.*

PHASEE, URIA. A tree of Ganjam and Goomsur, of extreme height 60 feet, circumference 6 feet, and height from the ground to the intersection of the first branch, 30 feet. A light hard wood, used for sugar presses, rice-pounders and bandy wheels, and occasionally for making boats. It is tolerably plentiful.—*Captn. Macdonald.* (*Note.*—Dr. Gibson pronounces this to be Dalbergia paniculata. Major Beddome mentions that it is Ano-geissus acuminatus, and believes this and the Parsi of Chota Nagpore and Pansee of Kimedy to be identical.)

PHATAL PIPAL, HIND.? A tree of Chota Nagpore, with a hard, white timber.—*Cal. Cat. Ex.* 1862.

PHAT THAN, BURM. A tree of Moulmein, wood used for chisel handles.—*Cal. Cat. Ex.* 1862.

PHOBEROS. Several of this genus occur in the extreme south of India, but little is known as to the quality of their woods. P. crenatus of *Wight's Prod.*, *p.* 29, occurs according to Major Beddome on the Shevaroy and Neilgherry Hills. P. Wightianus, *W. and A.*, occurs on the Neligherries. P. chinensis, *Low*, occurs as a small tree in China, and P. Roxburghii is a tree of Sumatra.—*Major Beddome, Voigt.*

PHOBEROS GÆRTNERI, *Thw.*

Katu-Kurundo. SINGH.

Wood hard, strong, elastic. Branches and young shoots tied round arms of out-riggers to strengthen them.—*Mr. Fergusson.*

PHOBEROS HOOKERIANUS, *Wright.* A large tree growing in the central province of Ceylon, at an elevation of 4,000 to 7,000 feet.—*Thw.*, *p.* 17.

PHŒNIX. A genus of palms, the species of which are found in the south of Europe, in the north of Africa, and in the south of Asia, eastwards to the Archipelago. As they do not furnish much useful timber or fancy woods a mere notice of them and their products may here suffice.

Phœnix dactylifera, Linn., the famed date tree of Arabia, grows there to a height of 50 to 80 feet. Baskets are made of the leaf stalks.

Phœnix farinifera, Roxb., grows along the Coromandel coast. It has an edible fruit, and its stem contains a fecula which is used as food by the natives in times of famine. The leaflets are wrought into sleeping mats, and the common petioles are split into three or four, and are used to make baskets of various kinds.

Phœnix sylvestris, Roxb. *Fl. Ind.* iii, 787.

Date Palm. ENG.
Wild Date. ,,
Sendh ka jhar. HIND.

FRUIT.

Date, Wild. ENG.
Khajur. HIND.

Common all over India, is generally supposed to be the Ph. dactylifera, in its uncultivated state. In the south of India, this tree is usually seen short, stunted and crooked, as it is generally notched for the sap. When not interfered with it grows straight and tall, in the Panjab up to 50 feet with 2 feet of girth, and attains its full size in 40 years. The trunks freed from the inner pith, are used as water conduits, and extensively for the formation of embankments, temporary bridges and piers. Its juice is of great value, as palm wine, which is largely used as a stimulant, and is extensively converted into sugar.—*Voigt, Dr. Gibson, Lt.-Col. Lake.*

PHOTINIA. Of this genus, two species are found in the south of India, P. Lindleyana, *W. and A. Pr.*, in the Neilgherry and Pulney hills, and P. Notoniana, *W. and A. Pr.*, of the Neilgherry and Animullay hills,

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both yielding woods adapted for cabinet-maker's purposes. Voigt mentions P. serratula and pustulata grows in China and Japan, and P. integrifolia in Nepaul, but Bengalensis, *Wallich*, a small tree of Nepaul, the Khassya hills, Assam and Chittagong: and P. eugenifolia, *Lindl.*, a tree of the Khassya mountains: their woods are not known.—*Dr. McClelland, Voigt, Major Beddome.*

PHOTINIA SERRATIFOLIA?

Douk-yat. BURM.

Found in the neighbourhood of Rangoon and along the banks of streams in the Rangoon district, in the direction of the teak forests. It yields a red wood, adapted to cabinet-making.

PHUGOORA. A Panjab tree, produces a kind of edible fig. Wood used for fuel and agricultural purposes.—*Lieut.-Colonel Lake, Commissioner, Jhullundhur Division.*

PHUTKAL, HIND.? A tree of Chota Nagpore, with a soft, white wood.—*Cal. Cat. Ex.* 1862.

PHYLLANTHUS, *Species, Brandis.*

Nasha. BURM.

A light-coloured wood, exhibiting a natural shine or polish when planed. A cubic foot weighs lbs. 35. In a full-grown tree on good soil the average length of the trunk to the first branch is 30 feet, and average girth measured at 6 feet from the ground is 6 feet. —*Dr. Brandis, Cal. Cat. Ex.* 1862.

PHYLLANTHUS EMBLICA, *Linn.*

Emblica officinalis, *Gært.*

Amluj. ARAB. HIND.	Nelli-gass. SINGH.
Aonla. DUK.	Topa nelli. TAM.
Aonli. MAHR.	Oosarika. TEL.
Amlaka. SANS.	

This tree grows in Ceylon, in peninsular India, northwards to the Jumna, westwards to the Panjab in Bengal, and east to the Moluccas. It is common in Ceylon, on exposed grassy places, up to 4,000 feet. In the Bombay side, it is pretty common, both inland and on the coast. Wood is hard and brittle, but rather durable, particularly under water, but is seldom obtainable sufficiently straight, except in gardens where it is often grown. In the Panjab it is used in door frames and for small "kurree." The bark is very astringent and used in tanning. Fruit is pickled or preserved in sugar. The fruit is one of the ingredients for making ink. *See* EMBLICA OFFICINALIS.—*Thwaites, Gibson, Voigt, Leut.-Col. Lake.*

PHYLLANTHUS RETICULATUS?

A shrub of the Coromandel side of India, the Konkans and Bengal, with a wood white and durable, and employed by the hill people for various economical purposes. It is frequently employed for ornamental hedges. Cattle eat the leaves.

PHYOO, BURM. A tree of maximum girth 1½ cubits, and maximum length 17 feet. Abundant in Tavoy and Mergui, also in less abundance in Amherst province. When seasoned, it floats in water. It has a tolerably good strong wood, but not with much tenacity of fibre.—*Captain Dance.*

PICEA WEBBIANA, *Lamb.*

Picea pindrow.	Picea khutrow.
Silver fir. ENG.	Spruce fir. ENG.
Webbs Pine. ,,	Himalayan fir. ,,

Tos also Tons from Sutlej to Jhilam.	Bajúr Pashtú.
Pandur of Kotgarh.	Pan, span or krok of Kanáwar.
Palúdar of Hazára.	Budil.
Rewan of Kaghán.	Pindrau, pandrai, chilrau, chilrai, khatrau, thanera, of (Sutlej valley and Basahir).
Pé of Lahaul.	Moranda, rágha, raisalla of Kumaon, &c.
Dhúnú of Pangi.	
Sal (near Badrawar).	
Rrei of Chilas.	
Ríyál, túng, birré of Kashmir.	

Dr. J. L. Stewart gives also the following as Panjab names of the tree:—

Badar.	Salle.	Rewari.
Rag.	Sara.	Kulre.

This tree has two varieties, Pindrow and Khutrow, which have by some been made into species. It is abundant in the Panjab Himalaya at elevations from 5,500 to 11,500 feet, frequently forming dense forests at or near the highest belt of tree vegetation up to the Indus. It is also found on the Safed Koh and in Kafiristan. It attains, (according to Hoffmeister) a height of 130 to 140 and 200 feet, with a girth ranging from 10 to 32 feet. It is one of the least valued of the Himalayan Coniferæ, for the fibres of its white, soft, coarse-grained wood are often twisted, and it rots readily where there is moisture. Under shelter and in dry climates it lasts longer, and, cleft not sawn, is used for shingles and door frames.—*Dr. J. L. Stewart, page* 224, *Mr. Powell.*

PICHHRA, HIND.? A tree of Chota Nagpore, with a soft white wood.—*Cal. Cat. Ex.* 1862.

PIENCHE, TAM. A Ceylon tree, the wood of which is of a dark colour, and very heavy and close-grained. It grows to about twelve inches in diameter, and fourteen feet in height. From this tree the native carpenters make the frames of vessels, it being considered durable; it produces a fruit which is of no use.—*Edye on the Timber of Ceylon.*

PIEN-MAH-NE, BURM. A Tavoy tree, yields very strong knee-timber.—*Dr. Wallich* [illegible]N-MAH PUE, Burm. A Tavoy wood.—*Dr. Wallich.* (*Note.*—Are these two species of Lagerstrœmia ?)

PIERARDIA, *Species ?*

Kunna. Burm. | Kuzzo. Burm.

A timber tree of Tavoy.—*Dr. Wallich.*

PIERARDIA SAPIDA, *Royle.*

Kana-yoe. Burm. | Lutco ? Hind.

A small tree of Tipperah and Burmah. A cubic foot weighs lbs. 61 ; in a full-grown tree on good soil, the average length of the trunk to the first branch is 15 feet, and average girth measured at 6 feet from the ground is 4 feet. Dr. Brandis says that the wood is not used, but Dr. McClelland notices Pierardia sapota, Kanayoe, Burm., as plentiful in the Pegu and Tounghoo forests as well as about Rangoon, and with a wood dark-brown in colour, and the Moulmein Committee sent to the Exhibition of 1862, a specimen of the wood of Pierardia sapida, Ka-na-oo, Burm., as a tree of Moulmein with a very hard wood : used for wheel axles. P. macrostachys, occurs as a tree of the Anamullay and Wynaad, but nothing is known of its wood.—*Drs. Brandis, McClelland, Cal. Cat. Ex.* 1862, *Royle's Ill.*

PINANG ?—Bach ?—A Penang wood of a brown colour. A large tree, wood used for beams.—*Col. Frith.*

PINLAY JALLAT, Burm. A tree of maximum girth 2½ to 3 cubits, and maximum length 15 feet. Tolerably plentiful by the sea side and very near to the water's edge, in the Tenasserim provinces. When seasoned, it floats in water. Its wood is strongly recommended for fuzes, it is free from oil and acid, and light, yet strong ; it is much used for rockets of enormous dimensions and for wooden guns, and is used for the burning of the dead phoongyes and on other occasions. —*Captain Dance.*

PINNAI, Burm. ? In Amherst, said to be a fruit tree ; the wood affords a yellow dye, and is a compact, handsome, yellow wood, suitable for common cabinet purposes. It is probably an Artocarpus. Indeed, under the same Burmese name, Mr. Blundell describes an Artocarpus of Tavoy with a strong, close-grained yellow wood.—*Cat. Ex.* 1851, *Mr. Blundell.*

PINATHA, Burm. ? In Amherst, Tavoy and Mergui, a tree of maximum girth 5 cubits, and maximum girth 25 feet. Very abundant all over the Tenasserim provinces, particularly in the old deserted towns. When seasoned it floats in water. It is a light wood with a yellow hue which darkens on exposure. Useful from the yellow dye which boiling extracts from it, and which is permanent in cloth, and not affected even by boiling water. It is used by Phoongees. This wood has a fine tone when struck, and is used for musical instruments by the Burmese, it is used by English brush-makers for the backs of hair brushes, being a handsome wood which takes a good polish.—*Captain Dance.* (*Note.*—Is this a species of *Artocarpus.* Is it the same as Pinnai ?)

PINUS. The Pine tree genus consists, for the most part, of timber trees, many of which are of great beauty and of much value on account of their timber. Several of them grow along with fir trees (Abies), yew trees, and the larch (Larix) in the northern Himalaya, in China and Japan, and one or two in Burmah, one ? in Cochin-China and one in Arabia. These have been noticed by Drs. Wallich, Royle, O'Shaughnessy, Hooker, Mason, Brandis, Cleghorn and Stewart, and Thunberg described others in Japan. The following may be noticed.

PINUS BRUNONIANA, *Wall.*

Pinus dumosa, *Lamb.* | Abies Brunoniana ?

Silver Fir. Eng. | Semadoong.

A tree of Nepaul, Bhootan and Gossain Than, growing occasionally in dense and gigantic forests, 70 to 80 feet high, with a clear trunk of from 15 to 20 feet, and a spreading branching head. Dr. Hooker measured one 28 feet in girth.—*Eng. Cyc., Hooker's Him. Journ.*

PINUS DAMMARA, Burm. *Wall.* According to Dr. Wallich, in Tavoy, a very large tree, used in building.—*Dr. Wallich.*

PINUS EXCELSA, *Wall.*

Tong-schi. Chin.
Lofty pine. Eng.
Kail or kaili or khal of Sutlej.
Darchil dar-chir of Chamba.
Partal of Kaghan, Jhilam, Chamba, &c.
Andal of Chenab.
Kuel of Sirmoor & Gurwahl
Lhim tser, chiti of Kanawar, Chamba, &c.
Bi ar of Hazara.
Limanza of Pashtu.
Pinni of Kafiristan.
Shom shing, Som of Lahaul.
Yari, Yero, of Kashmir.

Resembles the Weymouth pine, and is remarkable for its drooping branches. It grows in West Nepal, not in East Nepal and Sikkim, but is common in Bhootan. It is found with the deodar, at Narainhutty, Theog. It is common at from 5,000 to 13,000 feet in the Himalaya west of the Indus, in Kafiristan and near the Safed Koh. Trees up to 150 feet are met with, with a girth of 8 or 10 feet. The name Excelsa relates to its height on the mountains. Next to deodar, its close-grained, durable timber is the best of all the Himalayan coniferæ, and is employed for building purposes, shingles, and so resinous as to be used for flambeaux.—*Drs. O'Shaughnessy, page*

612, *J. L. Stewart, p.* 235, *Hooker's Him. Jour., Vol. II, p.* 45, *Mr. Powell, Lt. Col. Lake, Royle's Illustr., p.* 349.

PINUS GERARDIANA, *Wall.*

Neoza Chilghoza, *Elphin.*

Edible Pine. ENG.
Neoza. HIND. in Kumaon.
Chilgozeh. PUSHT.
Julgoseh. ,,
Ri of Kanawar.
Neoza or Chilgoza of Chira.
Chiri. PANJ.
Galboja of Chira.
Prita. PANJ.
Mirri of Pangi.
Galgoja of ,,
Kashti of Ravi.

This tree ranges in the Western Himalaya at 5,800 to 8,800 feet. It grows beyond the range of periodical rains far among the hills in Kafiristan, in the Safed Koh, north of Kabul, in the basins of the Sutlej, the Ravi, the Chenab and the Marru, near Astor and Ghilghit, and its presence indicates a dry climate. Its usual girth is 6 or 7 feet, and it does not grow higher than 50 and 60 feet. The trunk is short, and its branches are often much curved. Its timber is not much used, but it is tough. It is very resinous, and it is used for torches and fuel. The nuts are much prized for food, and sell for about 2 annas the seer in the hills.—*Eng. Cyc., Drs. O'Shaughnessy, p.* 613, *J. L. Stewart, p.* 225, *Mr. Powell, Royle's Illust., p.* 350.

PINUS KÆMPFERI, *Lambert.*

Abies Kæmpferi.

A native of Japan, found wild on the mountains of Fako.

PINUS KHASYANA.

Tin-yoo-ben. BURM.

Found on the hills in British Burmah, between the Sitang and the Salween rivers at an elevation exceeding 3,000 feet. It is a stately tree, sometimes as high as 200 feet to the top, but owing to the difficulties of transport from these hills no timber of this species has as yet been brought to Moulmein. There are two kinds, both very rich in resin. In a full-grown tree on good soil the average length of the trunk to the first branch is 80 feet, and average girth measured at 6 feet from the ground is 9 feet.—*Dr. Brandis, Cal. Cat. Ex.* 1862.

PINUS LATTERI, *Mason.* A tree of Amherst province, on the banks of the Thoungyeen river, 50 to 60 feet high, or more, and 4½ to 8 feet in girth. It is not found west of the Donaw mountains. The Karens make tar from its wood, which is excessively resinous.—*Dr. Mason, As. Soc. Journ., Jan.*, 1849.

PINUS LONGIFOLIA, *Lamb., Roxb.*

Biar wood. ENG.
Cheer. HIND.
Sullah. ,,
Thansa. ,,
Surrul. ,,
Chir. PANJ.
Drab. ,,
Chil. PANJ.
Nashtar or Nakhtar. PANJ
Ranzuru ,,
Salla, also Sarl, Hindustani and Himalaya beyond the Panjab.

Grows in the Himalaya, in the entrance to Nepal, in the Cheree pass, along the Tonse and Jumna rivers, in Kumaon at 2,500 to 5,000 feet, is common in the Siwalik hills, in the Panjab plains and in the Suliman range at elevations ranging from 1,800 to 9,000 feet: its girth is about 8 feet and elevation about 100. Growing at the lowest of the pine tree elevations, it is the most readily obtainable from the plains, and, as the wood is light, it is often employed as a substitute for English deal. It is light-yellow in colour, light and easily worked. There are, however, two varieties of this wood in commerce, one with a straight, and the other with twisted fibre, and the former is much preferred especially when required for planks, but both kinds are used for building purposes, for roofs, boat bottoms and tea boxes. It is full of resinous matter like the wood of the deodar, and both these are frequently employed in the hills for making torches. The "ganda baroza" or "khardalla," resin exudes from this tree, and is used for coating timber to prevent decay from the action of water; it is also valuable as an application to sores and forms a material in the manufacture of glass bangles or rings worn by native women. The bark is employed in the preparation of charcoal.—*Dr. J. L. Stewart, p.* 226, *Royle Ill., pp.* 340, 351, *Mr. Powell and Lieut.-Col. Lake quoting Mr. Barnes' Kangra Settlement Report, para.* 143, *Mr. R. Thompson.*

PINUS MASSONIANA, *Lamb., Abel ?*

Tinyooben. BURM.

Is a moderate-sized tree found in the forest of Dipterocarpus grandiflora (Eng forest), east of the Salween river. Spars of this species have occasionally been brought down to Moulmein. In a full-grown tree on good soil the average length of the trunk to the first branch is 50 feet, and average girth measured at 6 feet from the ground is 6 feet.—*Dr. Brandis, Cal. Cat. Ex.* 1862. (*Note*—Is this Dr. Mason's Pinus Latteri ?)

PINUS PINDROW, *Royle ?*

Abies Pindrow, *Royle.*
Picea ,,
Picea Khutrow.
,, Webbiana, *Lamb.*

Pindrow. HIND. ?
Morinda. HIND.

A magnificent species, even to the limits of the forests, and growing in Kumaon along with the deodar. It comes near P. Webbiana. —*Royle's Illustr.*

PINUS SMITHIANA, *Wall.*

Abies Khutrow ?
Abies Smithiana.

Indian Silver Fir. ENG.
Seh. HIND.

A spruce fir tree of enormous size on the slopes of the Himalaya. It has a dark and sombre appearance, but is peculiarly graceful owing to its symmetrical form and somewhat

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pendulous habit. Its wood is white, but considered indifferent though readily split into planks, and is used for beams and posts.—*Hooker's Him. Journ., Royle's Illust. Him. Bot., p.* 350.

PINUS WEBBIANA, *Wall and Lamb.*

Pinus spectabilis, *Lamb.*
Picea pindrow.
„ khutrow.

Abies Webbiana.
Picea „

Webb's Fir. ENG.
Purple-coned Fir. ENG.
Chilrow of Northern Himalaya.

Gobrea. HIND.
Sallur. „
Oonum. „

Grows at great elevations of the Himalaya, where it is one of the principal ornaments of the forests. It attains a height of 30 to 90 feet with a girth near the ground of 9 to 35 feet, and is unbranched at Choongthan for 40 feet. Its wood is white, soft, splits well, and is highly prized for its durability.—*Hooker's Him. Journ., Royle's Illust., p.* 350. (*Note.*—This seems the Picea Webbiana noticed above.)

PIRI. The Tamil name of a Ceylon tree which grows to about twenty feet in height and two feet in diameter. It is very close in its grain, and is used by the natives for the frames of vessels and in house work. It produces a fruit which is of no use.—*Edye on the Timber of Ceylon.*

PISTACIA INTEGERRIMA, *H. f. et Th.*

Rhus integerrima, *Wall.*

Kakar of Kangra and Salt Range.
Kakrain „ „
Kakrangche of Kanawar.
Kangar, or Khangar of Murree Hills.
Sarawan. PUSHTU.

Tanbari. PANJAB.
Shne. „
Masne. „
Drek. „
Gurgu. „
Tungu. „

This is an ornamental tree in spring. It grows in the Himalaya from Simla to Peshawar and all over the Panjab at from 1,500 to 5,500 feet in height. It has a girth of 10 or 12 feet. Its fine zebra-coloured wood is close-grained, makes handsome chairs, cabinets and other furniture, &c., and Europeans greatly esteem it. In Kangra it is made into sugar mills.—*Mr. Powell, Dr. J. L. Stewart, p.* 47.

PISTACIA TEREBINTHUS.

Khinjak. PUSHTU.
Shne. PUSHTU.

Grows in the N. W. Himalaya.

PITHECOLOBIUM SUBCORIACEUM, *Thw., En. Pl., Zeylan., p.* 100.

Meemini mara. SINGH.

A large tree, growing in the higher parts of the Anamullay hills and not uncommon, at an elevation of 4,000 to 6,000 feet, in the central province of Ceylon: wood seems very hard and strong.—*Thw. En. Pl. Zeyl., Major Beddome.*

PITOLO, URIA.? A tree in Ganjam and Goomsur, extreme height 30 feet, circumference 2 feet, and height from the ground to the intersection of the first branch, 6 feet. Abounds, but is only burnt for firewood.—*Captain Macdonald.*

PITTA KALOOCHIA, URIA? A tree of Ganjam and Goomsur, extreme height 36 feet, circumference 3 feet, and height from the ground to the intersection of the first branch, 15 feet. Used for posts, ploughshares and firewood as the kaloochia, but is a larger tree and very plentiful.—*Captain Macdonald.* (*Note.*—Is this Diospyros sylvatica?)

PITTOSPORUM FLORIBUNDUM, *W. and A. Prod., p.* 154.

P. verticillatum, *Wall.*
Celastrus verticillata, *Roxb.*.

Senacia Nepalensis.

Yekaddee. MAR.

Grows in Nepal, the Kheree pass, in the peninsula, and is a common tree in the western ghats, yields a strong, tough wood.—*Voigt,* 30, *Major Beddome.*

PLATANUS ORIENTALIS, *Linn.*

Doolb. ARAB.
Oriental Plane. ENG.

Buna, Bu-in, Bunin. PANJ.
Chinar. PERS.

The Oriental Plane is indigenous in most of the countries of the Levant; from whence it was transported in the first instance to Sicily. It is a native of Asia Minor, but extends into Cashmere. Some of the trees in the Turkish dominions, are of so gigantic a size, that the largest specimens in England, if placed near them, would appear like small shrubs. This plane was a great favourite among the ancients; they prized it particularly for the close shadow which its spreading foliage afforded, and celebrated many of their festivities beneath its branches. According to Belon, the Greeks of Mount Athos were in the habit of making boats of a single piece, out of the trunks of the largest tree. This tree is abundant in Cashmere, but does not seem to grow wild. It is seen frequently at villages in the Panjab Himalaya, east to the Beas river, up to 8,300 feet in Tibet, and is common, planted, in Affghanistan. In these places it ranges up to 75 feet in height with girths up to 28 feet. The wood is rather soft, but is beautifully marked. It has a peculiar even handsome grain, but is not much valued, though it is made into doors and furniture, and used in turnery. At Kabul it is made into gun-carriages, and in Cashmere into painted boxes. The wood is much like that of the beech, but it is less hard, has a finer and closer grain, and is more capable of receiving a good polish; it is, however, very apt to warp and split, is not durable, and is frequently attacked by the worm. Sinking the wood in water for several years, is said to improve its quality. In Cashmere it never seeds, and is only propagated by cuttings. Its bark occa-

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sion becomes hypertrophied into a cork-like substance.—*Dr. J. L. Stewart, Mr. Powell, Book of Trees, p.* 152, *Royle's Ill., p.* 344.

PLEUROSTYLIA WIGHTII, *W. et A.* 71.

Pyaru. SINGH. | Pyari. SINGH.

One of the Celastraceæ, common in Ceylon, but not large. A white coloured wood.—*Mr. Fergusson.*

PLYE, is collected in the forests of Borneo. It is the root of a large timber tree of the same name. It is very light, more so than cork, and might perhaps be used for the same purpose.—*Low's Sarawak.* (*Note*—Is it the root of Sonneratia acida: is it the Polai of Singapore?)

POAM also called Boa or Boe by the people of Malabar, is a Malabar and Canara wood much like the timber called in Ceylon Palari, or Pali, and Irambu, or, as known by the English name, iron-wood. It is a strong, heavy wood, and is considered durable. It grows from 20 to 30 feet high, and from twelve to thirty inches in diameter.—*Edye, Forests of Malabar and Canara.*

POCHOBORO, URIA? A tree of Ganjam and Goomsur. Extreme height 30 feet. Circumference 2½ feet, and height from the ground to the intersection of the first branch, 6 feet. Tolerably common, only used for firewood and charcoal.—*Captain Macdonald.*

PODADENIA SAPIDA, *Thw.*

Rottlera stylanthus, *Thw.*

A large Ceylon tree, growing at Ambagamowa and at Marai Calai near Ratna province, at an elevation of 1,000 to 2,000 feet: wood not known.—*Thw. En. Pl. Zeyl., p.* 274.

PODOCARPUS FERRUGINEA, *Don.* The Miro tree of New Zealand. It attains a height of 30 to 40 feet, and a circumference of 6 to 8 feet, and yields hard timber of a red colour, also a bitter gum resin.—*Bennett's Gatherings, p.* 415.

PODOCARPUS LATIFOLIA, occurs in the mountains of Sylhet.

PODOCARPUS MACROPHYLLUS, grows in Nepal, Penang, Amboyna and Japan.—*Royle's Ill. Him. Bot., p.* 349.

PODOCARPUS NERIIFOLIA?

Theet-min. BURM., or Prince of Trees.

A large tree with stem not very regularly shaped, found in British Burmah on the higher hills between the Sitang and Salween rivers, and on the range which skirts the coast of the Tenasserim provinces. The wood is close-grained and may prove a substitute for box-wood. A cubic foot weighs lbs. [illegible]. In a full-grown tree on good soil the average length of the trunk to the first branch is 20 feet, and average girth measured at 6 feet from the ground is 6 feet.—*Dr. Brandis, Cal. Cat. Ex.*

PODOCARPUS TOTARA, The "totara" tree of New Zealand, attains an elevation of 80 or 90 feet, and a circumference of 15 or 20 feet, being in diameter next to the Kowrie tree. Its timber is of a red colour, becoming darker by age and exposure. Its wood is light and durable, excellent for planks and spars, and is held in high estimation by the natives for constructing their canoes. It grows abundantly near the Kowa-Kowa river and also on the lofty hills near. It has an edible fruit.—*Bennett's Gatherings, p.* 415.

POINCIANA ELATA, *Linn.*

Neerangi. CAN. | Sooncaishla. TEL.
Pade Narrayan. TAM.

This willow grows in Malabar, and is much planted all over the Madras Presidency. Its wood is yellowish, does not crack, and is good for cabinet-makers' work. This tree has been extensively and successfully used by Major Lawford, Madras Engineers, as a protection for the footings of rivers and channel banks, where it is not wanted to spread laterally and to cause obstructions. It should be planted in cuttings in December; it grows quickly; its wood might be used for basket boats. The tree affords a grateful shade, and though continually stripped of its leaves, which, in Cuddapah, are extensively used for manuring indigo fields, it quickly replaces them and that abundantly.—*Dr. Cleghorn, Major Beddome.*

POINCIANA REGIA.

Gold Mohur Tree. ENG.

Introduced all over India. It is not useful for timber, but is valued for the beauty of its feathery foliage, which is of the most vivid green, and contrasts strikingly when the tree is in flower, with its gorgeous scarlet blossoms.—*Mr. Powell.*

POJO, HIND.? A tree of Chota Nagpore with a soft, white wood.—*Cal. Cat. Ex.* 1862.

POLAI. A tree of Singapore. The wood is used to make floats for fishing-nets. It is a very remarkably light, white wood, and might probably be imported and used with advantage as a substitute for cork, and some similar substances. (*Note.*—Is this the Plye of Borneo? Is it the Sonneratia acida?)

POLAVA, TAM.? A Tinnevelly wood of a light-brown colour. Used for musket stocks and building purposes.—*Colonel Frith.* (*Qu.*—Is this the Careya arborea?)

PONASO, Uria ? A tree of Ganjam and Goomsur, but is not very plentiful. It is the common jack tree, Artocarpus integrifolia.—*Captain Macdonald.*

PONG. The Tamil and Malayala name of a Malabar and Canara tree which has a very heavy and remarkably strong wood. It grows to about eight inches in diameter, and twenty feet in height, and spreads its branches to a great extent. The native carpenters prefer this wood for the knees of vessels, and also for general uses where strength is required. The trunk of the tree is applied to the purposes of the blockmaker, for shivers, blocks, &c.—*Edye, Forests of Malabar and Canara.*

PONGAH, Tam. ? A Travancore wood of a brown colour, specific gravity 0·988. Used for building houses.—*Colonel Frith.* (*Note.*—Major Beddome says this is the Calophyllum elatum, and identical with Colonel Friths Ponghu. Is this identical with Edye's Pong ?)

PONGAMIA, *Species. Brandis.*

Thin-win. Burm.

This is not uncommon in dry forests, in the plains and on the hills of British Burmah. The heart-wood, which is black and tough but rather small, is used, there, for the cross pieces of harrows, the teeth being made of Sha (Acacia catechu), Myouk-khyau, (Blackwellia tomentosa), and Gyo (Schleichera trijuga). A cubic foot weighs 60 lbs. In a full-grown tree on good soil the average length of the trunk to the first branch is 20 feet, and average girth measured at 6 feet from the ground is 6 feet. It sells at 12 annas per cubic foot.—*Dr. Brandis, Cal. Cat. Ex.* 1862.

PONGAMIA, *Species. Brandis.*

Thit-pa-gan. Burm.

A soft wood of British Burmah, said to be useless as timber. In a full-grown tree on good soil the average length of the trunk to the first branch is 40 feet, and average girth measured at 6 feet from the ground is 9 feet. It sells at 4 annas per cubic foot.—*Dr. Brandis, Cal. Cat. Ex.* 1862.

PONGAMIA ATROPURPUREA, *Wall.*

DARK-PURPLE PONGAMIA. This is a noble tree, very common about Moulmein, and is used in boat and house-building.—*Drs. Wallich and Mason.*

PONGAMIA GLABRA, *Vent.*

Galedupa Indica, *Lam.*
Robinia mitis, *Linn.*
Dalbergia arborea, *Willde.*

Korunja. Beng.
Karung. Burm.
Hoongay. Can.
Papri of Kumaon.
Suk-chaina. Hind.
Sukh-chain. „
Kurunj. Mahr.
Magul karanda. Singh.
Poonga maram. Tam.
Kanuga chettu. Tel.
Kaniga. Tel.
Korunja. Uria.

This graceful tree grows all over India and in the two peninsulas, attaining a height of 40 to 50 feet. It is excellent for avenues; in good soil it attains a large size, and has beautiful varnish—green leaves all the year round. It is very common in Southern India, flourishing equally well in the arid plains of the Carnatic and on the sub-alpine tracts of Mysore. It is common on the Bombay side, in forests chiefly, near and under the ghats, and will generally be found skirting streams. Its wood is white and firm, and is used by the natives. On the Godavery, its wood is said to be strong, but it does not appear to be used there. In Ganjam and Goomsur, its extreme height is 36 feet, circumference 4½ feet, and height from the ground to the intersection of the first branch 22 feet. The tree is very common there, but seems to be used only for firewood; the oil extracted from the fruit is used medicinally for itch and other cutaneous diseases, and is also employed as lamp oil. In Coimbatore the wood is said to be only fit for fuel, though Dr. Roxburgh states that it is light and white and serves for a variety of purposes. Dr. Gibson thinks it may be of some use for household purposes. The boughs and leaves are extensively used as a strong manure, for sugar-cane especially. The bitter oil is much used on the Bombay side in the manufacture of native felt, and has great curative powers in itch and mange. Its leaves and pods are sold in the bazars of India as medicine.—*Drs. Wight, Gibson, J. L. Stewart and Cleghorn, Simmonds' Com. Prod.; Voigt, Captains Macdonald and Beddome, Messrs. Rohde, Latham, Thompson & Fergusson, M. E. J. R.*

PONGHU, Tam. ? ? In Travancore, a wood of a brown colour; specific gravity 0·960, three feet in circumference, used for building. *Col. Frith.* (*Note*—Major Beddome says that this is Calophyllum elatum and identical with Colonel Frith's Pongah. *See* Poon, p. 214.

PON-PATHERA, Tam. In Tinnevelly, wood of a whity brown colour; specific gravity 0·683. Used for building purposes.—*—Col. Frith.*

PON-POSO KOMAREE, Uria ? A tree in Ganjam and Goomsur, extreme height 30 feet, circumference 2 feet, and height from the ground to the intersection of the first branch, 8 feet.—*Captain Macdonald.*

PONNAM, in Malabar. *See* Kumari.

POODY VAGA, Tam. ? A Travancore wood of a brown colour, specific gravity 0·400, 4 to 10 feet in circumference, 40 feet long; strong, never splits; used by wheelwrights.—*Col. Frith.* (*Note.*—Major Beddome tells me this is the Pul-vage the Albizzia odoratassima.)

K[illegible]LY-ETTY, Tam. ? A Travancore wood of a black colour, specific gravity 0·858, 2 to 8 feet in circumference ; a strong wood, used for furniture.—*Colonel Frith.*

POON. A commercial term, said to be derived from some Malay word meaning tree, but seemingly applied in India to the timber of several distinct trees, used for masts and spars. The Calysaccion angustifolia,—which grows in Canara and Sunda, in ravines of the ghats and below in sheltered valleys—is used there for “Poon” spars, and ought to be conserved everywhere and largely increased. Another of the supposed Poon spar trees, is the Calophyllum inophyllum, *Linn.*, *Roxb.*, a beautiful tree, which grows in the western part of Ceylon where it is employed for the masts and cross sticks of Yettra dhonies and fishing boats and poles of bullock carts. A cubic foot of it, there, weighs 40 lbs. Dr. Wight says that this tree is rare in Coïmbatore, and that the wood is coarse-grained, but very strong and durable, and on the coast is used in ship-building. In the alpine forests, it attains a great size and furnishes the poon spars so valuable for shipping ; but, so far as he could learn, there are two or three species of Calophyllum used for the same purpose under the general name of poon. It grows well in sandy tracts close to the sea, where few others thrive. Drs. Gibson and Cleghorn are of opinion that the Poon spars of commerce are obtained from the Calophyllum angustifolium, and their decision is of the greatest weight. Dr. Gibson's words are, that to the best of his knowledge, Poon spars are furnished by Calophyllum angustifolium, which is a magnificent tree in the ravines of the southern ghats. Later than the above, however, Dr. Gibson (in literis, 26th March 1864) mentions that the Calophyllum longifolium as mentioned by Roxburgh, is the only tree which furnishes the real Poon spars, and that this tree may be counted by thousands in the Coorg ghats, and may also be seen at Neelcund, Gursoppa and other places in South Canara. Sterculia fœtida, he adds, gives a bastard poon often used for the masts of Pattimar and other small craft, but never big enough for square rigged vessels. He never heard of the Dillenia being used. Major Drury, who long resided in Travancore, does not, in his “Useful Plants,” name the Calophyllum inophyllum (Ponna, *Maleal.* and *Tel.* : Pinnay, *Tam.*), as furnishing any of the Poon spars of commerce, but he adds that one kind of East Indian Tacamahaca is produced by Calophyllum inophyllum, though C. calaba and C. tacamahaca also furnish other kinds of tacamahaca wood. Also, in 1850, in the Proceedings of the Madras Central Committee, for the Exhibition of 1851, the Poon of commerce was supposed by Dr. Wight to be from the Dillenia pentagyna, “Kowa-dan,” Tel., a large timber tree, a native of the Northern Circars, which flowers in March and April. The similarity of native names between this and Calophyllum inophyllum led Dr. Wight to suspect that some mistake had arisen. He observes that the wood of Dillenia pentagyna is said to be exceedingly strong and very durable, even when buried under ground, and, it is a stately forest tree, common on the face of the W. ghats. At the Madras Exhibition of 1855, Dr. Cleghorn in the Jury Reports, noticing Sterculia fœtida, *Pinari maram*, Tam., *Guruppu badam chettu*, Tel., as a large tree in Mysore and on the western coast of the peninsula, adds that it is one of the trees believed to furnish the smaller Poon spars, and Major Drury, in Useful Plants, repeats that it furnished some of the masts known as Poon spars. Until botanical inquirers who visit the forests finally determine the tree or trees which furnish *all* the “Poon” woods of commerce, it would be useless to pursue the subject further, here. The tendency of the evidence, therefore, is to establish Calophyllum angustifolium, C. inophyllum, Calysaccion angustifolia, C. longifolia, Dillenia pentagyna and Sterculia fœtida, as trees which produce the “Poon” woods of commerce. The Bintangor wood of Penang, Malacca and Singapore, seems, also, to be the C. angustifolia or C. inophyllum, and, Dr. Cleghorn, in his forest reports, seems to have no doubt that C. angustifolia produces the Poon of Coorg, Mysore and Canara, where, he says, the trees are becoming very scarce, and the timber is consequently more valuable than teak. He enjoins their strictest conservation. In a special report on Poon spars, Dr. Cleghorn mentions that these are supplied entirely from Canara and Coorg. He tells us that in the ghats of Coorg and Malabar, the best timber has been cut away, and the wood-contractor is felling in more remote localities. Teak, Blackwood and Poon spars are every year becoming more scarce in accessible localities. Major Beddome, who, as Conservator of Forests, has had a very large experience, says decidedly that “all our poon and spars are from Calophyllum elatum, *Beddome.*” There may, however, have arisen some of all this doubt, from several trees having similar Tamil and Malyalum names. Thus, Poongum maram, Tam. ; Poongana, Maleal., is the Pongamia glabra. Ponna, is the Maleal., Pinnay maram, Tam. ? Poonnay maram, Tam., of Calophyllum inophyllum. Pinnari, Tam., Sterculia fœtida, and Pinnay maram, Tam., Dillenia pentagyna. Major Beddome considers the Pongah and Ponghu of Colonel Frith to be Calophyllum elatum, and tells me[illegible] Sirr poon in Canara, is Calophyllum [illegible]atum, and Kul poon in Canara is Calophyllum decipiens. Poon wood, as imported from the East Indies into Britain, very nearly resembles a dull-coloured and greyish specimen of mahogany, and would be useful for any purpose to which such kind of mahogany is applicable; besides having a greater degree of strength and stiffness compared with its weight. The Poon-wood, or Peon-wood of Singapore is of a light porous texture, and light-greyish cedar colour; it is there used in ship-building, for planks, and makes excellent spars. Calophyllum angustifolium, Dr. Roxburgh says, is a native of Penang and of countries eastward of the Bay of Bengal, and yields the straight spars commonly called Poon, which in those countries are used for the masts of ships. Tredgold says its texture is porous, but uniform; and the mean weight of a cubit foot in the dry state is 405 lbs. The cohesive force of Poon is from 10,000 to 14,700 lbs. per square inch, the mean weight of the modulus of elasticity for bars of an inch square is 1,689,800 lbs. The specific gravity and the relative strength, stiffness and resilient power compared with Riga fir, as 1,000, from Mr. Fincham's experiments are, as under:—

Specific gravity.	Strength	Stiffness	Resilience.	
579.....	1,380 ...	1,270...	1,400	Barlow.
647......	1,226 ...	1,230...	1,146	Fincham.
613	1,303 ...	1,250...	1,273	Mean of both.

From which it appears that it is superior to Riga fir in the properties required for mast wood. Colonel Frith noticing a Poon in Travancore, says it is of a brown colour, specific gravity 0·623, 2 to 4 feet in circumference and 80 feet long, and is there used for masts. Poon is used for the decks, masts and yards of ships, and it appears to be well adapted for these purposes, both by its strength and lightness.

Mr. Edye, writing on the Poon spars, generally, says that the light-red peon from the forests of Coromandel and Mysore, which can be procured at the port of Maugalore, on the Malabar coast, is considered the best of the growth of India, for the general purposes of lower masts, top-masts and yards. The peon masts, as to strength, compared with Riga, &c. spars for masts are superior to any; the weight of those of the proper sort is about the same as Riga fir, and their durability is very great; a set of lower masts would probably last for fifteen or twenty years. Mr. Edye, while in Canara, Malabar and Ceylon, thus described the following kinds of Poon, viz:—

Cheru-Puna, in Tamil and Malayala, which is the small-leaf peon. This wood is the real mast peon, which is preferred for the masts of ships or vessels. Peon, or Puna, consists of five sorts, all of which are similar in shape and growth; (*a*) the largest sort is of a light bright colour, and may be had at Mangalore, from the forests of Corumcul, in Canara, where it grows to a length of one hundred and fifty feet. At Mangalore, he procured a tree of this sort that would have made a foremast for the Leander, sixty-gun ship, in one piece, for the sum of 1,300 rupees, or 149£ sterling. Peon grows in the forests of Cochin and Travancore, but it is of a very inferior quality to that before stated; (*b*) one sort is named the *Karapa Puna*, which is dark peon; (*c*) another, *Malai Puna*, meaning the hill peon; and another sort, (*d*) the *Vallai Puna*, or the white peon, this sort is small, not more than twelve or eighteen inches in diameter, and eighteen or twenty feet long. In Canara, another sort, (*e*) named *Merchie Puna*, grows to twenty-eight inches, or three feet in diameter, and from thirty to fifty feet long; and is much like the American birch. It is generally defective and not durable, consequently it is never brought from the hills, for, when felled, it opens and splits at the top and butt for many feet in length. The weight of the peon may be said to be from forty to forty-eight pounds the cubic foot; but the lightest I had met with was thirty-four and three-quarters, and the heaviest fifty pounds the cubic foot, when dry. The leaf of this tree is small and oval, about two by one and a half inches broad, and the fruit grows in bunches, it is about the size of coffee-berries; from this the natives extract oil, which is used for various native purposes.—*Edye, Forests of Malabar and Canara.* (*Note*—Cheru means bastard.)

Puna, in Ceylon, is the wood commonly called Peon in England. It is used for masts, yards, &c. This is the wood so much spoken of by persons from Ceylon, and it certainly is of a good quality and superior to that of Malabar: but, from its small dimensions, its scarcity and the trouble in obtaining it, is of little consideration. The largest said to have been found was eighteen inches in diameter, and sixty feet in height; but the largest Edye could discover was not more than nine inches in diameter, and thirty-five feet high. In quality it is much the same as the first sort in Malabar, which may be obtained at Mangalore from the native merchants at all times when the coast is open (viz. from November to April), of three feet in diameter, and one hundred and ten feet long, for the sum of 150£ sterling.—*Edye on Timber of Ceylon.*

Vellie Puna, a Malabar and Canara tree, known in Malabar as the white or *Cat Puna*. It grows to about eighteen inches in diameter and eighteen feet high; and is used by the native carpenters for the frames of vessels. It grows curved, and is not durable. It is not found in any quantity in the forests.—*Edye, Forests of Malabar and Canara.*

Vellai Puna Pinu, the Tamil name of a Malabar and Canara tree, which is the white peon pinu: it can be procured on all parts of the coast of Malabar. It grows to seventy and eighty feet long, and two to three feet in diameter; the natives use it for the masts and yards of dowes and country vessels. It is more like the American white pine, and the upright yellow wood at the Cape of Good Hope, (Antinaqualis), than any wood he had seen.—*Edye, Forests of Malabar and Canara.*

Puna Balle in Tamil, and Punga Marum in Malayala ("Calophyllum" species?). This is a beautiful tree and of much value; it grows to about two and a half feet in diameter, and from ten to fifteen feet long, spreading its branches to a great extent, and into curves of various dimensions, which are valuable for native uses, particularly in building country vessels. It produces a fruit from which oil is extracted and is used for lamps, &c. The Arabs prefer this oil to any other to mix with chunam, for the purpose of covering the bottoms of their vessels to preserve them

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from [illegible] ; it is also used for the purpose of curing rheumatic pains, by being applied warm with friction. —*Edye, Forests of Malabar and Canara, and Timbers of Ceylon, Major Drury's Useful Plants, Edye, Roxburgh, Mr. Mendis, Voigt, Drs. Wight, Gibson and Cleghorn, Tredgold, Colonel Frith.* See POREAL PAINI.

POONA. A small tree of the Panjab. Its wood is white, hard, heavy, strong, durable ; used by zemindars for their houses and implements. Leaves given as fodder to cattle.—*Lieut.-Colonel Lake, Commissioner, Jhullundhur Division.*

POONNAY, TAM. In Tinnevelly, a wood of a deep straw colour, used for building purposes.—*Colonel Frith.*

POOVERSOO, TAM. In Tinnevelly, wood of a red colour ; specific gravity 0·860. Used for making bandies.—*Colonel Frith.* (*Qu.*—Thespesia populnea ?)

POPULUS, THE POPLAR.

Popelier. DUT.
Poplar. ENG.
Peuplier. FR.
Pappel. GER.
Pappelhaum. GER.
Pioppa. IT.
Populus. LAT.
Alamo. SP.

Plants belonging to the natural order *Salicaceæ.* The wood of the English species is soft and light, and not very durable, unless kept dry. In the Himalaya, the poplars flourish only at considerable elevations. P. ciliata, found at Kumaon, is common on the northern face of the Choor, at Muttiana, and at Seran in Lower Kunawar ; P. pyriformis, Royle, occurs at Deobun ; P. alba, Linn , common in Europe and the north of Asia, extends into the Himalaya ; P. dilatata, or P. alba, the Lombardy poplar, grows in the Panjab. It is the Arabic Ghurb : the Persian Wussuk and Safedan ; and Hindi Safeda ; P. balsamifera, P. ciliata, P. Euphratica and P. fastigiata are all trees of the N. W. Himalaya.—*Mr. Faulkner, Royle's Illustrations, Dr. J. L. Stewart, Mr. Powell.*

POPULUS ALBA, *L.* WHITE POPLAR.

Safeda. PANJ.
Chita bagnu. ,,
Fras of Cashmere.
Jangli fras. ,,
Frasti. ,,
Rikan. PANJ.
Pannan. PANJ.
Chanam ; chanini. PANJ.
Chanuni of the Chenab.
Mal of Kanawar.
Spelda or Speldor. Trans-Indus.

This tree grows wild in parts of the basins of the Jhelam and Chenab, is occasional on the Sutlej at 4,000 to 8,000 feet, and at 9,000 feet in Affghanistan and Thibet, growing to 50 or 70 feet high with girth of 6 to 8 feet. It is cultivated in Kabul and west of the Indus ; it grows to a large size in Pangi. Its wood like that of all the poplars is soft, white, easily worked and suited for carving. In Ladakh and Lahoul it is used for roofing. In Affghanistan is used for the round boxes in which grapes are packed for export.—*Mr. Powell, Dr. J. L. Stewart, p.* 204

POPULUS BALSAMIFERA, *Linn.*

Balsam Poplar. ENG.
Berfa. PANJ.
Maal. ,,
Makal. PANJ.
Yarpa of Lahoul.
Changma ,,

This tree is common, planted, at 9,000 to 14,000 feet, in Lahoul, Ladak and Spiti. In Lahoul it is supposed to be the abode of a deity and is never cut. It grows to 50 feet high and up to 9 feet in girth, and grows planks up to 2½ feet in breadth.—*Dr. J. L. Stewart, p.* 204, *and Dr. Cleghorn quoted in Mr. Powell's Hand-book.*

POPULUS CILIATA, *Wall.*

Pahari pipal.
Bagnu of Kaghan.
Krammal of Kanawar.
Phalja of Hazara and Murree.
Fala or falsh, or palach of Kashmir.
Chalun of Kotgarh.
Pabe and chanun of Chenab.

Grows at 6,000 feet above the sea level. Wood not valued. The coma of the seeds is good for paper material, and is seen lying like snow on the ground in many places.—*Dr. J. L. Stewart, Mr. Powell's Hand-book.*

POPULUS EUPHRATICA, *Oliv.*

Hodung. PANJ.
Bahan. PUSHTU.
Safeda. PANJ.
Sperawan. PANJ.
Bhan. PANJ.
La Bhan. ,,

This tree grows on the Jordan, Tigris and Euphrates, on the banks of the Indus and Chenab, is common wild in Sind, in the Southern Panjab and in the low land near rivers, also in Lahoul and in Thibet up to 10,500 feet. Its girth is 7 or 8 feet. The wood is generally white or yellowish-white, soft and toughish, and when unseasoned is liable to the attacks of insects ; when old the heart-wood is dark-coloured and strong, and is used for beams, for wells and in turnery, rarely, in Sind, for boats, but is largely so on the Euphrates. Its twigs are exported and sold at Lahoul and elsewhere for tooth-brushes.—*Dr. J. L. Stewart, p.* 204, *Mr. Powell.*

POPULUS FASTIGIATA, *Cleghorn.*

Safeda of Kash and Kanawar.
Frast, Kash.

Populus nigra is almost similar, it is planted near villages.—*Dr. Cleghorn, quoted in Mr. Powell's Hand-book.*

POPULUS NIGRA, *L.* ITALIAN POPLAR.

Var. b. pyramidalis.

Frast, Farsh. PANJ.
Safeda, Makkul. ,,
Yarpa, Yulatta. ,,
Pakahu, Kramall. PANJ.
Binns, Changma.

This tree is common, planted, in Cashmere, on the Chenab at 3,000 to 11,500 feet, on the Sutlej and in Ladakh at 13,300 feet, and is common in Affghanistan ; trees are seen 6 to 12 feet in girth and up to 50 to 105 high. —*Dr. J. L. Stewart, p.* 106.

[illegible]REAL PAINI. The Tamil and Malayala name of a Malabar and Canara wood which may be ranked among the best sort of the several Dupi maram, or Paini, and next to the peons on the coast of Malabar. It might be used for small yards of vessels. At times this wood is called Puni Paini by some of the northern natives: it is of a light-red colour, and grows to about eighteen inches in diameter and sixty feet long.— *Edye, Forests of Malabar and Canara. See* Poon.

PORTIA, Tam.? A small Palghat tree; wood of a brown colour, used for musket-stocks.—*Col. Frith.* (*Note.*—Is this the Thespesia populnea? *See* Poverasie.)

PORTO KOORWAN, Uria? A tree of Ganjam and Goomsur, of extreme height 20 feet, circumference 1 foot, and height from the ground to the intersection of the first branch, 5 feet. Chiefly remarkable on account of its seeds, called here Indrajebho, which are used medicinally and held in great estimation. The juice of the leaves is given to young cattle to destroy worms. The bark is also used medicinally. The tree abounds.—*Captain Macdonald.*

POTOOBAOLO, Uria? In Ganjam and Goomsur, a tree of extreme height 45 feet, circumference 4 feet, and height from the ground to the intersection of the first branch 12 feet. Occasionally used for bandy-wheels and plough-shares. The leaves are eaten as a sort of vegetable by the hill people. Tolerably common.—*Captain Macdonald.*

POUK-THA or THAN-YEN, Burm. Dr. McClelland reports "probably Inga bijemina." Its maximum girth is 3 to 4 cubits, and maximum length 22 feet. Widely scattered, but abundant all over the Tenasserim Provinces inland. When seasoned, floats in water. It is an excellent and durable wood, would do well for handles of tools. This wood is of the same nature as Pyeng Khadoe (Inga xylocarpa), of which it is said to be a variety.—*Captain Dance.*

POUK-THEN-MAYEK-KYOUK, Burm.

A light coloured close-grained wood of British Burmah, much prized by Burmans. A cubic foot weighs 58 ℔s. In a full-grown tree on good soil the average length of the trunk to the first branch is 15 feet, and average girth measured at 6 feet from the ground is 5 feet.—*Dr. Brandis, Cal. Cat. Ex. of* 1862.

POVERASIE in Tamil, Santa Marie in Portuguese, and called by Europeans Ceylon Tulip tree. Is a Ceylon tree, used at times by the coach-makers for wheels, &c. It is a tree generally planted to ornament walks in gardens, and is very common: it produces a yellow flower.—*Edye on the Timber of Ceylon.* (*Qu.*—Thespesia populnea? *See* Portia. Pooversoo Pooverasie.)

PREMNA INTEGRIFOLIA, *Roxb.*

Premna hircina, *Buch.*

Chamaree. Mahr.
Appel. Maleal.
Munnay maram. Tam.
Ghebu nelli. Tel.
Pinna nelli. ,,

The greens.

Ugnie munda. Sans.
Munni kiray. Tam.
Passu-munna-kiray. Tam.
Ghebbu nelli kura. Tel.

The root.

Muni ver. Tam.
Ghebbu nelli veru. Tel.

A small tree, common in India, the timber is only fit for the most common purposes.—*Voigt, Drs. O'Shaughnessy and Ainslie.*

PREMNA LATIFOLIA, *Roxb.*

Nelli chettu. Tel.

A small tree of Ceylon, at Kaduwella, Caltura and Trincomallee, also of the Coromandel coast, common in most jungles; wood white, firm, and used for various economic purposes.—*Messrs. Rohde's MSS., Voigt, Mr. Ferguson, Major Beddome.*

PREMNA PYRAMIDATA, *Wall.*

Kyoon-na-lin. Burm.

A small tree of British Burmah; wood strong, used for weavers' shuttles. A cubic foot weighs ℔s. 52. In a full-grown tree on good soil the average length of the trunk to the first branch is 30 feet, and average girth measured at 6 feet from the ground is 5 feet. —*Dr. Brandis, Cal. Cat. Ex.* 1862.

PRINSEPIA UTILIS, *Royle.*

Garandu of Murree.
Gurinda of ,,
Chamba of Kaghan.
Arund of Jhelum.
Tatua of Chenab.
Phulwara ,,
Kari ,,
Jinti of Chenab.
Karngura of Ravi.
Bekli, behkul, bhehkar and bhekling of Kanawar, Ravi, Beas and Sutlej.

Common in the Panjab Himalaya at 2,500 to 8,000 feet. Wood used for walking sticks. Fruit yields an oil used for food and for lamps.—*Mr. Powell, Dr. J. L. Stewart, p.* 81.

PREMNA TOMENTOSA, *Willde: Roxb.*

Chambara. Mahr.
Koloottay teak maram. Tam.
Nagara chettu. Tel.
Navuru. ,,
Naura. Tel.
Naooru. ,,
Nagool. ,,
Nagal. ,,

A small tree of Ceylon, where it is common up to 3,000 feet; grows in most jungles of Southern India, in Coimbatore, the Bombay ghats and the Northern Circars. It has a pretty-looking wood, hard and close-grained, of a brownish yellow colour and well fitted for ornamental purposes.—*Drs. Wight and Gibson, Major Beddome, Mr. Fergusson.*

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PROME. The trees associated with teak in the Prome forests, 22 in number, are thus enumerated by Dr. McClelland, in the order of their numerical proportion :—

1. Acacia catechu.
2. Odina wodier.
3. Pentaptera.
4. Spondias acuminata.
5. Nauclea.
6. Inga.
7. Tectona grandis.
8. Careya arborea.
9. Terminalia.
10. Shorea robusta.
11. Walsura piscidium.
12. Strychnos.
13. Conocarpus robusta.
14. Hymenodictyon parviflora.
15. Bursera serrata.
16. Kydia.
17. Dipterocarpus alatus.
18. Blackwellia.
19. Hopea odorata.
20. Pterocarpus dalbergioides.
21. Pterospermum ? Heynianum.
22. Melicocca trijuga.

Thus, there are six other kinds of trees more numerous within the limits of the Prome teak forests than teak. *Acacia catechu* probably forms 40 per cent. of the whole trees in the forests ; *Odina wodier*, 10 per cent. ; *Pentaptera* and *Spondias acuminata*, 5 per cent. each ; *Nauclea* and *Inga*, about 4 per cent. each ; *Tectona*, *Careya arborea*, and *Terminalia*, 2 per cent. each ; the remaining thirteen may be put down as bearing the proportion of 1 per cent. each, leaving 13 per cent. to be made up of other species, such as *Barringtonia acutangula*, *Acacia serissa*, *Galedupa arborea*, *Mimosa octandra*, *Erythrina*, *Dalbergia*, *Bombax* and *Xanthoxylon alatum*, which are found in low grounds only. —*Dr. McClelland in Selec. Records Govt. of India, Foreign Dept.*, *No. IX.*, *p.* 103. *See* BURMAH, PEGU.

PROONBAJAH ? A tree of Akyab, and plentiful in Arrakan. Used for making wooden bells, &c.—*Cal. Cat. Ex.* 1862.

PROSOPIS SPICIGERA, *Linn.*, *W. & A. Prodrom.*

Adenanthera aculeata, *Roxb.*

Shami. BENG.
Jhand. HIND.
Khar. ,,
Sounder. MAHR.
Aghzakar. PUSHTU.
Se of Salt Range.
Kunda. SINDI.
Vunni maram ? TAM. ?
Parumbay maram. ,,
Janum Chettu. TEL.
Chami. TEL.

PODS.

Sangar.
Sankhri.
Shangar.
Galls.
Kharnub. HINDI.

A thorny tree of the Madras Presidency, grows in Coimbatore, in the black cotton soils of Mysore, common in the waste places and forests of Bombay, common in Sind and in the rakhs of the Panjab, where it is the chief fuel of the Railway. Abounds in the Panjab, but owing to incessant lopping, seen generally as a large shrub. When protected, grows to 60 feet high and 9 feet in circumference. The wood weighs lbs. 51 to a cubic foot. It is soft, open-grained, and eaten by white ants. It attains a considerable, even a large, size, in Coimbatore and Mysore, and the timber is straight-grained, strong and hard, easily worked and used for bandy wheels and other common purposes. It never reaches such a large size on the Bombay side, as would afford a square log of more than 9 inches. In Sind, however, where it is common, it attains a large size, and its heartwood is strong, tough and dark-coloured, and is commonly used for weavers' shuttles. Dr. Wight found it sustain a weight of 592 lbs. Its pod is about an inch in circumference, and from 6 to 12 inches long, and when ripe it contains a quantity of a mealy substance which has a sweetish taste and is eaten by the natives. The tree is reverenced in the Dassera rites.—*Drs. Ainslie, Wight, Gibson and J. L. Stewart, p.* 74, *Major Beddome*, *Mr. Powell.*

PROSORUS CYANOSPERMUM, *Thw.*

Sudu-leyang-gas. SINGH.

Grows in Ceylon, at Ratnapoora and Ambegamoa up to 1,000 feet. Timber white, tough and used in house-building.—*Mr. Fergusson.*

PROSORUS INDICA, *Dalz.*, 281.

Karron-gas. SINGH.

Common in Ceylon up to 2,000 feet ; grows also in the Western ghats of India. Timber white, tough and used in house-building.—*Mr. Fergusson, Major Beddome.*

PROTIUM CAUDATUM, *W. & A. Prod.*, *p.* 176.

Kiluvy. Tam of Ceylon.
Konda mamidi ? TEL. ?

Common, used as a plant for hedges and fences in Ceylon, and growing common in most Madras jungles, wood soft and useless. —*Mr. Fergusson, Major Beddome.*

PRUNUS. A genus of plants, which produces the Apricot, *Prunus Armeniaca ;* the cherry, *Prunus cerasus*, also *Prunus Bokhariensis*, Royle, *Prunus triflora*, Roxb., *P. domestica*, Linn ; P. *insitita*, *P. padus*, Horned-cherry or wild plum ; *P. Puddum*, or Bird cherry, all of which grow abundantly in the North-west parts of India.—*Royle's Ill.*, *p.* 205.

PRUNUS ARMENIACA. THE APRICOT.

Hari ; harion. Jhelum.
Gurdalu, cherkush. Kangra Kanawar.
Chiroli, t'ser-kuji, chuli, chur-sari. Chenab.
Chir, chiran and sari. Ravi.
Shari. Beas.
Zard-aru. Pushtu.
Jald-aru, chuli. Sutlej.
Chuli. Ladak.
Mandata. Trans-Indus.

Fruit.

Khista, moist.
Khubani, dried.

Grows wild up to 4,000 and 6,000 feet in the Panjab Himalaya, but is cultivated up to 10,500 feet in the arid climates of the upper

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Su[illegible] and Chenab, and even to 11,500 and 12,000 feet in parts of Thibet. In those higher regions the fruit is indifferent, but in some of the Kanawar villages the fruit forms the chief wealth, and it is largely grown in Affghanistan. The wood is formed into the Tibetan drinking cups. A gum similar to gum arabic exudes from the tree.—*Dr. J. L. Stewart.*

PRUNUS BOKHARIENSIS, *Royle.* Bokhara Plum.

Alu Bokhara. Hind.

The tree thrives in the North of India (Firminger). It grows well at places near Lahore, producing a deep–red fruit. The fruit is imported from Affghanistan.—*Dr. J. L. Stewart, M. D.*

PRUNUS DOMESTICA, *Linn.* The Plum.

Olchi, er, aor of Kangra.
Aluchi, Panjab.
Alu Bokhara ? Panjab.

Grows wild in Kashmir, cultivated in the Panjab for its waxy yellowish fruit; and in Affghanistan and Yarkand its fruit is good. In Kashmir, the wood is used for making the skeletons of "papier mache" boxes.—*Dr. J. L. Stewart.*

PRUNUS INSITITA. The bullace plum tree of Europe, is indigenous in Kashmir.

PRUNUS PADUS, *Linn.*

Cerasus cornuta, *Royle.*

Paras, kalakat, gidar; dak, bart, of Jhelum and Kaghan.
Jamun, krun of Chenab and Kanawar.
Zamb, chule of Kangra.
Dudla, jamu of Sutlej.
Bird cherry. Eng.
Horned " "
Wild plum. Eng.

The bird cherry grows at Simla at an elevation of from 7,000 to 10,000 feet, and in many parts of the Panjab Himalaya at 4,000 to 10,500 feet elevation. Its wood is used for ploughs, railways, &c., and for spoons. Its fruit is edible but has an astringent mawkish taste.—*Dr. J. L. Stewart, Mr. Powell.*

PRUNUS PUDDUM, *Lindley.*

Chamiari; amalguch of Jhelum.
Pacha, Paja, Paddam of Beas and Sutlej.

This small tree grows at 3,000 to 5,000 feet in the Panjab Himalaya, up to near the Indus. Its wood is coarse-grained light, soft, apt to split, and to be attacked by insects, but is used for buildings and occasionally for implements.—*Dr. J. L. Stewart.*

PSIDIUM, The Guava trees, grow in the south-east of Asia, but succeed also in the gardens of northern India. The Chinese or purple guava, Psidium Cattleyanum, *Sabine,* grows in China. The common red and white, round and pear-shaped guavas, from P. pomiferum and P. pyriferum are found everywhere in gardens of Southern Asia, and were probably brought to India from South America through the Portuguese; in Tenasserim, the white is cultivated more extensively than any other fruit tree. It grows in all parts of the Deccan, is esteemed as a dessert fruit, but the scent when too ripe is unpleasantly powerful; it makes an excellent jelly, and is also prepared like damson cheese. The fruits have been brought to great perfection in some Indian gardens, and one variety is almost divested of seed—perhaps by repeatedly propagating from layers. The fruit is generally preferred fresh from the tree in the early morning; as the heat of the day is supposed to injure its flavor.—*Drs. Ainslie, p. 223, Mason, Royle's Illustr., Cleghorn, M. E. J. R., Riddell, Mr. Rohde, MSS.*

PSIDIUM GUAJAVA.

Amrut. Hind.
Amrud. Hind.

Not very commonly cultivated except in the east of the Panjab, and probably introduced by Europeans.—*Dr. J. L. Stewart.*

PSIDIUM POMIFERUM, *Linn.*

Lal paira. Beng.
Red guava. Eng.
Apple-shaped guava. Eng.
Lal Saffri-am. Hind.
Jam. Hind.
Malaka pela. Maleal.
Segapu varnam ? Tam.

Grows in Peninsular India. Wood resembles that of the P. pyriferum.

PSIDIUM PYRIFERUM, *Linn.; Roxb.*

Guava pyriformis, *Gartn.*

Paira. Beng.
Peyara. "
Sebe mara. Can.
Jam. Duk.
White guava. Eng.
Pear-shaped guava tree. Eng.
Supari-am. Hind.
Supi-am. "
Pela. Maleal.
Manjal varnam. Tam.
Coaya maram. "
Jama chettu. Tel.

The fruit.

Jam. Duk.
Guava. Eng.
Pera kai. Maleal.
Utchola. Sans.
Coia pallum. Tam.
Goia pandu. Tel.

Grows all over the south of India and besides yielding fruit, the wood is useful for handles of tools, mallets, pegs, &c., and has been used for wood-engraving, for which however it is indifferent, it is small but very hard. Good gun stocks are made from the old wood.—*Drs. Riddell and Cleghorn, Mr. Rohde, M. E. J. R., Mr. Powell.*

PTERIDOPHYLLUM DECIPIENS, *Th.*

Rhus decipiens, *W.&A. Pr.*
Pehimbia-gass. Singh.

Common in the Western ghats and grows in the Central Province of Ceylon up to an elevation of 3,000 feet. It flowers in January and fruits in March. It is a very ornamental tree, and the wood is used for building purposes.—*Thw. En. Pl. Zeyl., p. 59.*

PTEROCARPUS DALBERGIOIDES, *Roxb.*

Padowk-wood. Anglo-Burm.
Padouk. Burm.
Hanee ? mara ? Can.
Honee mara ? "
Red wood tree. Eng.
Andaman red wood tree. Eng.
Tenasserim mahogany. Eng.
Beebla. Mahr. ?

This large and handsome tree was introduc-

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ed by Col. Kyd into the Calcutta botanic garden in 1791, whence it has been spread over the country. It is a native of the Andaman Islands, where it grows to an immense size, with a girth of 15 feet, and forms a valuable timber tree. Under the names of Hanee, *Can.*, Beebla, *Mahr.*, Dr. Gibson says it is common in large jungles, above and below, in Canara and Sunda. It is found chiefly as a large tree about the neighbourhood of Prome and inhabited places to the north of that town, but rarely in the forests. Dr. Brandis (and quoted in the Cal. Cat. Ex. of 1862,) tells us that trees of the largest size of this strong and beautiful timber abound in the forests of British Burmah, east of the Sitang river, also in the valley of the Salween river and its tributaries, the Thoungyeen, Yoonzaleen, Hlineboay, Houndraw and Attaran: but, is much less frequent in Pegu and entirely wanting in some districts. The wood is prized beyond all others for cart wheels. The trees are felled green, and are split up into short planks 3 feet 6 inches long, 2 feet wide and 9 inches thick. Three of these pieces make one wheel, and a pair is sold on the spot in the forests of the Prome district at from 12 to 25 Rupees. Captain Dance mentions that, in the Tenasserim provinces, its maximum girth is 6 or perhaps 7 cubits, and maximum length 15 to 30 feet, that of great girth being always short. It is abundant but scattered all over the provinces. When seasoned it sinks in water. It takes about two years to season; when cut it has a peculiar and fragrant smell, and he adds that another wood, called Puddowk, is procurable in abundance at Tavoy, which seems very strong but does not sink, and is devoid of smell. The Padouk wood, the Pterocarpus dalbergioides of Roxburgh, is extensively used in the Gun Carriage Manufactories of India: in that of Madras, for light field beams, cheeks, perches, poles, timber-framing, waggon perches and framing, heavy field cheeks, transoms, axle cases, hand spikes, poles, braces, framing, &c., all parts of garrison carriages, garrison traversing platforms, as well as gun and mortar platforms, transport carriages and limbers, cart work of all sorts, and heavy and light field wheels. In Burmah, a cubic foot weighs 60 lbs. In a full-grown tree on good soil the average length of the trunk to the first branch is 85 feet, and average girth measured at 6 feet from the ground is 9 feet. It sells at 12 annas per cubic foot. The wood is not unlike mahogany, but is more heavy, red and coarse-grained, that of the root is beautifully variegated, closer grained and darker coloured. It is used for furniture, and, by the Burmese, to make their musical instruments.—*Voigt, Drs. Gibson, McClelland, Brandis, Royle Illust., p.* 195, *Eng. Cyc.*, *Mr. Robert Brown, Cal. Cat. Ex.* 1862, *Mad. Cat.* 1862. (*Note.*—Major Beddome is of opinion that the tree here described is P. Indicus.)

PTEROCARPUS DRACO, *Linn.*

P. officinalis, *Jacq.* | P. hemiptera, *Gært.*

Dum-ul-ukwain. AR.

Introduced into India, from the West Indies, in 1812. Produces the dragon's blood of the shops. Wood unknown.—*Voigt.*

PTEROCARPUS INDICUS, *Willde.*

Padouk. BURM. | Rosewood. ENG.

Puddowk of Tavoy.

Grows in the Malay islands, in China and the Moluccas. It is a handsome fast-growing tree with long waving branches and clusters of deep yellow flowers which scent the air. It produces very fine timber, said to be white? and not equal to the red padowk of the P. dalbergioides. This species also yields a gum kino. But, Dr. Wallich noticing it as a Moulmein tree says it has a very beautiful and hard compact timber, closely resembling the Andaman wood.—*Voigt, Dr. Cleghorn in M. E. J. R., Drs. Mason and Wallich.* (*Note*—Major Beddome is of opinion that this is the same as P. dalbergioides. Are the white wood and red woods of the same tree, but of different ages?)

PTEROCARPUS MARSUPIUM, *Roxb.*

Pterocarpus bilobus, *Don.; Mill.*

Yegy. BENG.
Vaygah. ,,
Pit sal. ,,
Yegah? ,,
Pedong? BURM.
Whonay. CAN.
Hone. ,,
Wulla Honay. CAN.
Dhin daga? ,,
Pit shala. HIND.
Bejasar. HIND. of Nagpore.
Bejasal. ,,
Bheulah. MAHR. of Nagpore.
Beeblah. ,, of Dekhan.
Kariatha gara. MALEAL.
Vajaya. HIND. of Nepaul.
Gam-malu-gaha. SINGH.
Vangay maram. TAM.
Ragta hanay? CAN.
Beula. DUK.
Bia. ,,
Bibla. ,,
Vangay wood. ANG-TAM.
Yagesah wood. TEL.
Bibla. HIND.
Vengay maram. TAM.
Egisa. TEL.
Vegi. ,,
Vegisa. ,,
Yegasal karrah. TEL.
Pia salu. ,,
Yegis.
Yegee. TEL. of the Godavery.

This is a large and a very beautiful tree, especially when in flower in the beginning of the rains: its seeds ripen about the close of the year. It is widely diffused in the forests of the Madras Presidency, and yields one of the most abundant and useful timbers, also the valuable gum kino. It is one of the most lofty and striking trees in the Indian forests, with a very high trunk, which, however is scarcely ever straight. It is met with from Cape Comorin to the Himalayas. Mr. McIvor says, it is common all round the foot of the Neilgherry ghâts, and two thousand trees were seen by Dr. Cleghorn along the roads through the Wynaad, notched wi[illegible] V-shaped incision, for the extraction of kino which meets with a ready market on the coast and is exported in wooden boxes to Bombay. It grows luxuriantly on the eastern ghats, on the hills between Vellore and Salem, and on the Malabar and Canara ghats, where large quantities are collected of the resinous substance it yields, and sent to England under the name of "kino." The tree abounds near Tellicherry and along the whole Malabar coast. Dr. Cleghorn has seen it in the ascent both of the eastern and western ghats. It is not generally common in the Bombay forests, but most so in the northern inland ones, and also in those of the extreme south, as in the Bedee talooka, but it everywhere reaches a great size. Dr. Wight sent to Dr. Cleghorn specimens of its gum from Coimbatore. Mr. Latham mentions it as occurring in the Nalla Mallai, and as furnishing there a darkish, coarse-grained, serviceable timber. Dr. Roxburgh found it in the Northern Circars, and Captain Beddome in the Forests of the Godavery; Captain Sankey mentions it in the Nagpore forests. It is noticed by Buchanan Hamilton under the name of *Vijaya* as occurring in Nepaul, and Voigt mentions it in the Rajpeepla jungles and in Assam. In Nagpore, the average length of the logs is from 18 to 30 feet, and from 4½ to 3½ feet in girth, it sells there at 5 annas a foot. It is, next to teak, the best wood in the south of India for building purposes, and is the best for railway sleepers. Dr. Wight says the wood in Coimbatore is dark-coloured and strong, sustaining a weight of 370 to 400 lbs., but it is said to require being kept dry, and Dr. Gibson adds that on the Bombay side of India, the wood is much used in house-building, but does not stand exposure to wet. Mr. Rohde considers the timber useful for many purposes; it is very little inferior to teak, seems less liable to split after long exposure and is equally strong. He says that very great caution is, however, requisite in using this wood to obtain it sound, and adds that it is heavier than teak, more expensive than teak to work and, when sawn green, the outer planks bend considerably. When wet, or unseasoned, it imparts a yellow stain and it gives out to wet lime (white-wash for example), a dark rusty brown colour which depreciates it for house-building. In Nagpore, Captain Sankey tells us, it is called Bejasar, and has there a reddish-coloured heart, surrounded by an outer ring of a white soft wood. This ring varies from ½ to 3 inches in thickness, so that it may be adzed off without very much diminishing the scantling of a full-grown tree. It has a very close and frequently winding grain, but is subject to numerous faults of a coal-black and charred appearance. Frequently a fault of 3 inches diameter and considerable length presents itself. On this account it might be a dangerous timber to use for joists. For all works, however, where such faults would not signify or would be exposed, as in rafters, bressumers, &c., &c., and, generally, pieces of small scantling, it would be found a most valuable timber. In strength it is much superior to teak, apparently always retains its essential oil, and, like it, door frames of 20 years' standing are the only instances of white-ants having attacked the red wood. From the large size which is procurable in Nagpore as well as the many excellent qualities of this timber, Captain Sankey classes it both as a tie beam and a rafter wood. Dr. Cleghorn tells us that this tree is greatly prized at Dharwar, not for its exudation, but for its timber, which was extensively used in the cotton gin factory. Mr. Rohde adds that vessels built in the Ganjam districts are planked with it, and that the door panels and venetians of the neglected houses at Ganjam formed of this wood, stood better than teak similarly situated. On the Godavery, the native "dholl" is often made of it. The timber has been fully tried as sleepers on the Madras railway, and found useful. It makes handsome furniture, and resembles fine mahogany, but must be well seasoned, to avoid its yellow stains. This tree yields from incisions the gum kino of commerce. It issues as a blood-red juice, which, on being simply exposed to the sun, hardens and then quickly cracks into little angular masses, and crumbling fragments which constitute, without further preparation, the kino of the shops. Specimens of the exudation sent by Dr. Cleghorn to Professor Christison in 1846 from Mysore, were considered by him "quite identical with the kino of commerce." The tree being thus widely diffused, and the exudation procurable in large quantity, it may possibly come into extensive use in dyeing and calico-printing. The product can be obtained with facility by simply incising the bark, and requires no outlay save that of collecting.—*Drs. Roxburgh, Flora Indica, Vol. III, p.* 234, *Coromandel Plants, II, p.* 116, *Wight, Gibson, Royle, Cleghorn, Voigt, Eng. Cyc., Captains Sankey, Puckle and Beddome, Messrs. Latham, McIvor, M. E. J. R., Madras Conservator's Report of* 1858.

PTEROCARPUS SANTALINUS, *Linn.; Roxb. Fl. Ind., III,* 234; *W. & A.*

Sundun? Ar.
Sundel-ul-ahmar. Ar.
Rakto-chandana. Beng. Hind.
Chandana. Beng. Hind.
Na-sa-phiu. Burm.
Honnay. Can.
Whonnay. "

Sandel-hout. Dan.
Lal chandana. Duk.
Red sandal wood. Eng.
Sanders wood "
Red sanders wood. "
Santale-rouge. Fr. "
Sandal-hols. Ger.
Ruttunjee Guz.?

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Sandalo-roso. It.
Rakt chandan. Mahr.
Uruttah chandanam. Maleal.
Sandal surkh. Pers.
Bakam. Pers.???
Racta chandana. Sans.
Ranjana. Sans.
Ract-chundun. Singh.
Segapu chendanum. Tam.
Erra chandanam. Tel.
Ku chandanam. „
Rakta chandanam. „
„ gandham. „

This tree grows abundantly in the North Arcot forests and the Nagery hills west of Madras. Its wood is sold by weight as a dye wood, and forms a regular article of export. In the Cuddapah forests, the red sanders may be had in any quantity, of a superior quality, both in logs, which are converted into posts for houses and which the natives prefer to any other timber, and in pieces and roots for export as a dye wood. A bandy will contain from 20 to 25 converted logs, which, at Madras, readily fetch from 2 to 2½ rupees the log. The value of a bandy-load of red sanders at Madras is therefore from 40 to 50 Rupees. It grows also on the Nalla mallai, and on the Pulicat ? and Triputty ? hills. It is found in the Godavery forests, and grows it is said, in the island of Timor and in other islands of the Archipelago. It is brought to Coimbatore in small quantities from Mysore, and sells at a high price, by weight, as a dye wood. It is a large tree ; but, as brought into Madras since the past 20 years, its timber is in short billets, generally hollow, or in twisted or knarled masses, the billets 2 to 3 feet long and rarely 3 feet in girth, indicating that the forests are being exhausted. It is not, seemingly, used in Madras city, though Major Beddome says it is so, but it is very largely exported to Calcutta. The billets are of a deep red colour, the concentric circles being divided by dark lines. With different mordants, it yields various shades of red, but these are said not to be permanent. The Madras exports for 1853-1854 amounted to 47,431 cwts., value 59,570 Rupees. In the 4 years 1852-53 to 1855-56, there was exported from Madras cwts. 1,79,815, value Rupees 2,20,983 ; the destination chiefly being the United Kingdom, Indian French Ports, Pegu, Bengal. Red sanders wood is principally shipped to England from Calcutta in logs from 2 to 10 inches diameter, generally without sap, and sometimes in roots and split pieces. This will explain much of the shipments from Madras to Calcutta, in which latter district the tree is not known to grow. The logs are often notched at both ends, or cut with a hole as for a rope, and are much worn externally from being dragged along the ground ; other woods, as also indeed ivory tusks, are sometimes perforated for the like purpose. It is heavy, extremely hard, with a fine grain, and is very much used as a dye wood, and by colour manufacturers : also, often in turnery. It takes a beautiful polish. It is largely used in Bengal for hindu images, and in Ajmere for the suffumigations of hindu idols. It yields its colouring matter to alcohol and ether, but not to water.—*Tredgold, Mr. Rhode's MSS., Captain Beddome, Dr. Wight, Dr. Cleghorn in M. E. J. R. of* 1855, *Dr. Cleghorn in Conservator's Report, p.* 37-38, *Mr. Faulkner, Simmonds, M. E. J. R., Commercial Products of Madras Presidency, Useful Plants, Voigt.*

PTEROSPERMUM ACERIFOLIUM, *Willde.*

Kanuk champa. Beng.
Nagee. Burm.

Pterospermum (from the Greek word πτερόν signifying a wing, and σπέρμα a seed), a small genus of plants found in the southern parts of India and the Archipelago. All the species form handsome trees, and abound in mucilage. According to Voigt, this is a large tree, of the peninsula of India and Assam, and grows along with teak in the Pegu forests, though scarce. Not available west of the Sutlej. The timber is extremely valuable and is as strong as teak or oak, but its durability has never been fairly tested as it has never been desiccated like teak. It attains a girth of 10 or 12 feet and rises to a lofty height. It has a dark-brown wood.—*Dr. McClelland, Eng. Cyc., Voigt, Mr. Powell.*

PTEROSPERMUM ACEROIDES, *Wall.*

Tha-ma-jam-wai-zoke. Burm.

A timber tree of Martaban, and growing in the Pegu forests similarly to P. acerifolium, but plentifully : timber of the same qualities as P. acerifolium.—*Voigt, Drs. Wallich and McClelland.*

PTEROSPERMUM HEYNEANUM, *Wall.*

P. suberifolium, *Willde.*
Velago xylocarpa, *Gærtn.*

Nolika chettu. Tel.
Loluga kurra. „
Lolugu chettu. Tel.

A tree of Courtallum, of the Godavery forests, and the Ginji hills. Wood pinkish and hard, but is generally hollow in the centre.—*Voigt, Captain Beddome.*

PTEROSPERMUM INDICUM, *Wall.*

Kyaboka wood tree. Eng.
Kaiaboka wood tree. „
Amboyna wood tree. „
Lingoa wood tree. Eng.
Seriou-lout. Malay ?

According to Holtzapfel, the botanical name of the Kyaboka wood tree has not yet been determined with certainty. But, it is stated by Wallich and is generally believed to be the *Pterospermum indicum.* The Kyaboka is said by Prof. Reinwardt, of Leyden, to be the burr of the *Pterospermum indicum* ; but, by others that of *Pterocarpus draco,* and to be brought from the Moluccas, the islands of Borneo, Amboyna, &c. The native name appears, from

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the specimen of Mr. Witson Saunders, to be "*Seriousdout*," the wood itself is of the same colour as the burr, or rather lighter, and in grain resembles plain mahogany.' Col. Lloyd is quoted as saying that the root of the cocoanut tree is so similar when dry and seasoned, to the bird's-eye part of the wood, termed kyaboca, that he could perceive no difference, the cocoa has a tortuous and silky fracture: almost like indurated asbestos. But, it is said, the comparison of the palm wood with the kyaboka, renders the question uncertain, as amongst the multitudes of ordinary curly woody fibres, which one cannot account for in a palm, there are a few places with soft friable matter much resembling it. The general belief is that P. Indicum throws out burrs or excrescences, and that which receives the name of *Amboyna wood* or *Lingoa wood*, seems to be the timber of the bole of the tree, sometimes along with that of the burr. The Lingoa wood, or Amboyna wood of commerce is abundant at Ceram, New Guinea, and throughout the Molucca seas, and can be obtained in any quantity, if the precaution be taken of ordering it during the previous trading season. It is very durable and takes a high polish. At the Exhibition of 1851, there was seen a circular slab of this wood from Ceram, 6 feet 7 inches in diameter. But, such large circular slabs are only obtained by taking advantage of the spurs which project from the base of the trunk, as the tree itself has not sufficient diameter to furnish slabs of such widths. They are occasionally met with so large as 9 feet, but the usual size is from 4 to 6 feet. Amboyna or Lingoa wood was imported in considerable quantities into Great Britain during the period in which the Moluccas were British possessions, but Poole's Statistics of Commerce says it is now rarely seen in Britain.

The *Kyaboka wood* of commerce, on the other hand, is supposed to be from the knotty burrs or guarled excrescences. It is brought from Ceram, New Guinea, the Arru and other islands of the Moluccas, to Singapore; and is much esteemed as a fancy or ornamental wood for cabinet-work; of late years, its estimation seems to have decreased in Europe, but it is still much valued by the Chinese, and is sold by weight. It is sawn off in slabs from 2 to 4 feet long and 2 to 8 inches thick. It resembles the burr of the yew, is very hard and full of curls—the colour being reddish brown, varying to orange. It is used for making small boxes, writing desks and other fancy ornamental work. It is tolerably hard, and full of small curls and kots, the colour is from orange to chesnut-brown, and sometimes red-brown. At the Madras Exhibition of 1855, a slab of Kyaboka wood, imported from Singapore, was exhibited by Dr. Sanderson. A small portion was polished, and in its marking showed well the highly ornamental appearance of the timber. The specimen exhibited the very knotty character and curly fibres of the wood, from which pieces of even a foot square, free from flaws, can rarely be obtained. Mr. Fergusson says he cannot find Pterospermum Indicum as a Botanic name in any book, and he does not think that a tree having such a name exists. It is, he thinks, most likely the wood of "Pterocarpus Indicus," which he believes to be the proper name for a handsome tree, growing at the Ceylon Rifle Mess House, Colombo, introduced from the Eastern Islands, and which is deservedly becoming a popular road-side tree; but in Dr. Wallich's list of woods sent to the Exhibition of 1851 he gives this tree as the source of the Amboyna or Lingoa wood and of the Kaya boca. Also, Major Beddome, in a note to Pterospermum suberifolium (*Willde*) states that "the beautiful Pedouk or Lingoa wood is the produce "of Pterospermum Indicum from the East "Indian islands."—*Holtzapfel, M. E. J. R. of* 1855, *Cat. Ex.* 1851, *Sing. Cal. Ex.* 1861, *Poole's Statistics of Commerce.*

PTEROSPERMUM LANCEÆFOLIA, *Roxb.* A tree of Assam, with dense strong wood.

PTEROSPERMUM SEMI-SAGITTATUM, *Buch.* A tree of Assam, which flowers in March, April and May, with large white fragrant flowers.—*Voigt.*

PTEROSPERMUM SUBACERIFOLIUM? Dr. McClelland, at p. 133 of No. IX of the Records of the Government of India, thus remarks: *Pterospermum aceroides*, Thama-jam-wai-zoke: also *P. subacerifolium*, and *P. acerifolium*, Na-jee, *Burm.*, are three species of large timber, found growing along with teak in all the forests of Pegu. The two first are plentiful, but the third kind is scarce. This timber is extremely valuable, and is as strong as either teak or oak. Its durability for purposes of ship-building has never been tested, because it has never been desiccated or killed like the teak. It attains a girth of ten or twelve feet and rises to a lofty height. Wood dark-brown.—*Dr. McClelland.*

PTEROSPERMUM SUBERIFOLIUM, *Lam.; Willde.; W. & A. Prod., p.* 68.

Pterospermum canescens, *Roxb.*

Velanga.
Velongo. SINGH.
Taddo. TAM.
Taddi marom. TAM.
Lolagu. TEL.

This is a native of all the mountainous tracts of the south of India, of the Godavery and Western ghats. In Ceylon, it is common up to an elevation of 2,000 feet, especially in the drier parts of the island. The tough, pinkish, wal-put-[illegible] wood is useful for many purposes where toughness is required, such as poles of bullock carts, betel trays and gun stocks. A cubic foot weighs 36 lbs., but it is said to last only from 5 ? to 7 ? years. Flowering time the beginning of the hot season, March, April and May. Trunk erect, growing to be a timber tree of middling size.—*Messrs. Thw., Rohde, MSS., Mendis and Fergusson, Major Beddome*.

PUL-I-SHINTA, Tel., Bauhinia, *species*. A wood of the Godavery forests, said to be good and hard. Tree not apparently described. Legume filled with a scented pith.—*Captain Beddome.*

PULIYARA. A wood of the Panjab, used for fuel and for scabbards of weapons. The tree bears a bright red flower.—*Lt. Col. Lake, Commissioner, Jhullundhur Division.*

PULSUNDRA, Tel. This Nalla Mallai wood is of a reddish colour, strong and useful.—*Mr. Latham.*

PUNA KAD in Salem, *see* Kumari.

PUNDE CYANN. The Tamil name of a Ceylon tree which grows to about twenty inches in diameter, and twelve feet in height. It is a close-grained wood, and resembles the English pear tree. It is used by the natives for various purposes in making farming utensils.—*Edye on the Timber of Ceylon.*

PU-NE THA, Burm. ? A tree of Moulmein. Wood soft, used in ordinary purposes of building materials.—*Cal. Cat. Ex.* 1862.

PUNGUL. The Tamil name of a Ceylon tree which grows to about eighteen inches in diameter, and twelve feet in height. It is of little use. Its fruit, and also its juice, are used as applications to ulcers, &c. From the seed a fixed oil is prepared which is considered valuable in rheumatic pains, bruises, &c.—*Edye on the Timber of Ceylon.*

PUNICA GRANATUM, *Linn.*

Rana. Arab.
Dalim, Darim. Beng. Hind.
Pomegranate. Eng.
Anar. Hind. cultivated.
Daru. ,, wild.
Daruni ,, of Kaghan.
Dalima. Malay.
Rumom Paio. Maleal.
Darimba. Sans.
Madalam. maram. Tam.
Dadima chettu. Tel.
BulooSitoon Rooman Yunani.

The pomegranate is cultivated all over India, but is common wild in the N. W. Panjab Himalaya at from 2,500 to 6,000 feet, and the wood is used by the natives for roofs. Its fruit is largely used.—*Dr. J. L. Stewart.*

PUOAM. The Tamil name of a Malabar and Canara tree, wood of a light-red colour, much like the Spanish mahogany. It is generally curved in its growth, and is considered very durable. It grows to about twenty-four inches in diameter, and seldom more than twenty feet high. It produces a fruit which the natives pickle, and from which also they extract an oil, which they use for rheumatic gout, bruises, and various complaints: it is considered by them to be valuable. The weight of this wood is about thirty-seven and a half pounds the cubic foot.—*Edye, Forests of Malabar and Canara.*

PUOAM PARASOM. The Tamil name of a Malabar and Canara tree with which the natives of Malabar are well acquainted, and which they use for the masts and yards of pattamahs. It grows to about sixty feet high, and fifteen inches in diameter: it may be considered inferior to the mast peon before described.—*Edye, Forests of Malabar and Canara.*

PUPRA, Hind. ? A tree of Chota Nagpore. With hard, white timber.—*Cal. Cat. Ex.* 1862.

PURLA KIMEDY FORESTS. Capt. Philipps, writing in 1855, in describing the forests and woods of this district, says they now furnish sufficient timber for all local purposes and admit of large quantities being sent annually, principally by water, to Calingapatam, Chicacole, Poondy, &c. With proper management and control over the Sowrah population, the dread of violence from whom prevents the low country people very generally from entering the country, he believed that 4 or 5,000 logs of timber of all sizes, could be obtained between January and June ready on the banks of the two rivers, to be floated down in rafts to the coast of Calingapatam with the first floods. This number could be exceeded were a few elephants employed to drag the logs from the more distant hill sides, where the best timber trees now remain, to spots accessible to carts and oxen. The woods of Kimedy cover 400 square miles, the principal ones and those most accessible at present are found on both banks of the Vumshadura river above and below Buttely, Barsinghy, Jerangee, Giba, Cothoor, Jadoupully, and, indeed, the whole of the hilly tracts abound with fine trees, the only difficulty being their removal, when cut, through dense jungle and across ravines to the river bank. The zemindar of Kimedy owns these woods and forests, and no revenue is now derived from them. The teak tree was introduced some 25 years ago by the then Dewan; few of those planted have escaped the axe, but the remaining specimens thrive remarkably well and promise to become very fine trees in time. This may be attributable to the peculiar climate, which greatly resembles that of Burmah. The heat, rains, cold weather, mists and fogs are as intense and very similar to those experienced on the other coast. The indigenous trees are extremely numerous, the principal ones and those most in request are noticed in the annexed list. No regulation whatever existed in 1855 as to the felling of timber in this zemindary, large trees and small alike were cut whenever a demand for such exists, and latterly a very large quantity of both has been required for the public works, bridges, &c., in the course of construction at Chicacole and in the northern trunk road as well as in the Kimedy zemindary. The annual destruction of timber on the hill sides is very great as the " Sowrahs" seldom cultivate the same patch two seasons successively, being indebted for their scanty crop and for the quantity of charcoal deposited between the rocks and stones, by burning the timber and brushwood on the ground where it has been felled some three or four weeks before the commencement of the rains. This may be immaterial in remote hills, but he thought that on the confines, especially near Sowacotta, the practice should, if possible, be put a stop to as the whole of the surrounding country is now destitute of timber. He found the average number of carts leaving Sowacotta with wood, during April 1855, to be 27 daily. Writing 9 years later, in 1864, he added from Captain Beddome the botanical names of the trees, the list of which he had given in 1855 in the Uria language.

Achoo, Uria. Togaroo chettu, Tel. Morinda tinctoria, Extreme height 36 feet, circumference of trunk 3 feet, height from ground to first branch 10 feet. A light wood, of which stocks of match-locks are made. Leather is dyed pink with the bark of the roots.

Ambeleetoba, Uria. Citrus, *species*. Extreme height 30 feet, circumference of trunk 1 foot, height from ground to first branch 6 feet. Made into charcoal and used as firewood.

Arjoono, Uria. Terminalia arjuna. Extreme height 90 feet, circumference of trunk 7 feet, height from ground to first branch 35 feet. When hollowed out with fire and axe, this tree makes a good ferry boat, being very buoyant—it is the best wood for catamarans. Its Telugu name is Vedda Sirissim chettu.

Base Dimeree, Uria. Ficus, *species*. Extreme height 25 feet, circumference of trunk 2 feet, height from ground to first branch 9 feet, made into charcoal and used as firewood.

Balliah, Uria. Ballidi chettu, Tel. Semecarpus anacardium. Extreme height 40 feet, circumference of trunk 4 feet, height from ground to first branch 15 feet. The nuts of this tree are eaten, and an oil is extracted from the seeds which is stated to have healing properties. It is also applied in rheumatism.

Barokolee, Uria. Regu chettu, Tel. Zizyphus, *species*. Extreme height 30 feet, circumference of trunk 3 feet, height from ground to the first branch 8 feet. Used for an infinity of purposes the leaves pounded are considered a cure for rheumatism, and lac is obtained from it.

Baelo, Uria. Pterospermum suberifolium. Extreme height 30 feet, circumference of trunk 3 feet, height from ground to first branch 10 feet. Made into charcoal and used as firewood.

Baujhonoo, Uria. Dalbergia oojeinensis. Extreme height 45 feet, circumference of trunk 5 feet, height from ground to first branch 22 feet. A very strong wood, of which bandy wheels, ploughshares, &c., are made.

Baygona, Uria. Navelli chettu, Tel. Vitex negundo. Extreme height 18 feet, circumference of trunk 1 foot, height from ground to first branch 4 feet. Made into charcoal and used as firewood.

Behenta, Uria. Tov Tolli yelga chettu, Tel. Limonia acidissima. Extreme height 28 feet, circumference of trunk 3 feet, height from ground to first branch 9 feet. A hard strong wood used for axle trees, oil presses, &c.

Bello, Uria. Maredu chettu, Tel. Ægle marmelos. Extreme height 30 feet, circumference of trunk 2½ feet, height from ground to first branch 10 feet. The fruit of the tree is eaten, the leaves and a preparation of the wood itself is offered in the temples.

Bhayroo, Uria. Bhalloo chettu, Tel. Chloroxylon swietenia. Extreme height 35 feet, circumference of trunk 3 feet, height from ground to first branch 18 feet. Used for axle trees, presses, rafters, &c., healing properties are said to exist in the leaves when applied to sores.

Bodaka, Uria. Teku chettu, Tel. Hymenodyction excelsum. Extreme height 38 feet, circumference of trunk 3 feet, height from ground to first branch 14 feet. A somewhat similar wood to Goombaree. Palanquin poles, grain measures and boxes are made of it.

Bonokoniaree, Uria. Ochna squarrosa. Extreme height 45 feet, circumference of trunk 3 feet, height from ground to first branch 9 feet. Used in the erection of village houses and as firewood.

Bouro, Uria. Bouroga chettu, Tel. Bombax malabaricum. From the roots of this, the silk cotton tree, a tonic is extracted, and the gum and bark is given as an astringent.

Charo, Uria. Chara-mamidi chettu, Tel. Buchanania latifolia. Extreme height 36 feet, circumference of trunk 3 feet, height from ground to first branch 12 feet. A very common tree, used for many domestic purposes. (*Note.*—Is this the Buchanania latifolia ?)

Dhamona or Tur curra, Uria. Tada Karra chettu, Tel. Grewia tiliæfolia. Extreme height 39 feet, circumference of trunk 3½ feet, height from ground to first branch 18 feet. A very long-grained tough wood, pliant and light, used for dhoolies, cots, bandy wheels and poles, spear and axe handles, and for other purposes where strength and pliantness are desirable. Admirably adapted for fishing rods, lance handles. (*Note.*—Throughout India several species of Grewia are known by the Hinditerm "Dhamono." Dr. Royle, (*Ill. Him. Bot., pp.* 103—4,) says Grewia helicterifolia, tiliæfolia and sapida—the last being the G. pumila, *Don.*, and G. nana, *Wall.*—grow in Bengal and Assam in the forests at the foot of the mountains. G. sclerophylla, didyma, oppositifolia and elastica, are found in the Kheree pass,

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in the Dhoon, as well as higher up in the Himalaya, particularly in the neighbourhood of villages. G. elastica, he adds, called "dhamnoo" by the natives, and common in the Himalaya and in northern latitudes at moderate elevations, affords timber which is highly valued for its strength and elasticity, and is therefore much used for bows, buggy shafts, bangby sticks, &c.)

Dhimeree, Uria. Bodda chettu, Tel. Ficus glomerata. Extreme height 40 feet, circumference of trunk 4 feet, height from ground to first branch 9 feet. Of little use, is considered sacred by the hill men, and the fruit is eaten by them.

Dohu, Uria. Conocarpus latifolius. Extreme height 45 feet, circumference of trunk 5 feet, height from ground to first branch 20 feet. A common tree, of little value save as firewood.

Dolosinga, Uria. Vitex pubescens. Extreme height 22 feet, circumference of trunk 1½ feet, height from ground to first branch 7 feet. Used in the erection of village houses and as firewood.

Goondopolaso, Uria. Extreme height 40 feet, circumference of trunk 2½ feet, height from ground to first branch 8 feet. Used in the erection of village houses and as firewood.

Goombaree, Uria. Gummudu chettu. Tel Gmelina arborea. Extreme height 50 feet, circumference of trunk 4½ feet, height from ground to first branch 20 feet. A wood in great request used for every purpose. White in colour and very light.

Gooroohado, Uria. Extreme height 22 feet, circumference of trunk 2½ feet, height from ground to first branch 10 feet. Used in the construction of houses generally.

Gouharea, Uria. Tuma chettu, Tel. Acacia suma. Extreme height 45 feet, circumference of trunk 5 feet, height from ground to first branch 13 feet. A very strong wood, from which plough-shares, rice-pounders, sugar-mills, oil-presses, wheels, &c., are made.

Haredha, Uria. Kara Kaia chettu. Tel. Terminalia chebula. Extreme height 42 feet, circumference of trunk 4 feet, height from ground to first branch 18 feet. Used for rafters and beams, and to burn into charcoal.

Hinjolo, Uria. Kanapa chettu, Tel. Barringtonia acutangula. Extreme height 30 feet, circumference of trunk 4½ feet, height from ground to first branch 6 feet. A common wood of great use in bridge or anicut building where wells have to be sunk into the soil: the frame-work on which the masonry is built, is generally of this wood, and it is almost imperishable under water.

Holondho, Uria. Kumba chettu, Tel. Nauclea cordifolia. Extreme height 70 feet, circumference of trunk 7 feet, height from ground to first branch 32 feet. A light wood used for making boats and masts at Calingapatam, and for many other purposes.

Jamoo, Uria. Neradi chettu, Tel. Eugenia jambolana. Extreme height 70 feet, circumference of trunk 6½ feet, height from ground to first branch 30 feet. The ferry boats on the Kimedy river are made of large logs of this timber hollowed out; it is very light and is used for many other purposes. A decoction of the bark is a favorite remedy for bowel complaints.

Joontia, Uria. Schreberas wietenioides. Extreme height 40 feet, circumference of trunk 4 feet, height from ground to first branch 15 feet. A white wood, but very hard, and seldom used.

Joree, Uria. Buddi chettu. Tel. Ficus t'siela. Extreme height 50 feet, circumference of trunk 5 feet, height from ground to first branch 8 feet. The seeds of this tree are eaten by the Sourahs in times of scarcity, and the wood is made into bandies, &c.

Jundamaree, Uria. Extreme height 60 feet, circumference of trunk 4 feet, height from ground to first branch 9 feet. Used in the erection of village houses and as firewood.

Kaloochia, Uria. Diospyros sylvatica. Extreme height 25 feet, circumference of trunk 2½ feet, height from ground to first branch 10 feet. Of little value.

Khoiro, Uria. Chandara chettu. Tel. Acacia sundra. Extreme height 25 feet, circumference of trunk 2¼ feet, height from ground to first branch 6 feet. A hard wood used for plough-shares, rice-pounders, sugar-mills, oil-presses, wheels, &c.

Kindhoo, Uria. Chinna Tumi chettu. Tel. Ebony. Extreme height 50 feet, circumference of trunk 4½ feet, height from ground to first branch 25 feet. A hard blackwood, writing desks or boxes are often made of it.

Kodoro, Uria. Extreme height 30 feet, circumference of trunk 2 feet, height from ground to first branch 9 feet. Used in the erection of village houses and as firewood.

Kokhoondia, Uria. Extreme height 30 feet, circumference of trunk 1½ feet, height from ground to first branch 8 feet. Used in the erection of village houses and as firewood.

Koombee, Uria. Aray chettu, Tel. Careya arborea. Extreme height 35 feet, circumference of trunk 3 feet, height from ground to first branch 6 feet. A light wood used in making bandies, the bark spun into twine, is used throughout the hill country as a slow match.

Konchona, Uria. Kanchanapu chettu, Tel. Extreme height 30 feet, circumference of trunk 2¼ feet, height from ground to first branch 9 feet. Used in the erection of village houses and as firewood.

Kossoye, Uria. Briedelia retusa. Extreme height 23 feet, circumference of trunk 1 foot, height from ground to first branch 6 feet. Made into charcoal and used as firewood.

Koosoomoo, Uria. Schleichera trijuga. Extreme height 45 feet, circumference of trunk 4 feet, height from ground to first branch 11 feet. A heavy hard wood used for oil and other presses, the seeds afford an oil, and they gather from the bark a description of lac. (*Note.*—Dr. Royle, *Ill. Him. Bot.*, *p.* 138, says—this tree is called *Kusoombha* and *Gusum*, in distant parts of India, where it is indigenous, and where, as in the Doon, in April, it may readily be recognized at a distance, by the red colour of its young leaves. The wood is hard and used as timber, and the pulpy sub-acid aril, forms a grateful fruit.)

Kowrila, Uria. Vadisay chettu, Tel. Cluytia collina. Extreme height 30 feet, circumference of trunk 3½ feet, height from ground to first branch 7 feet. A light wood used in building huts and making toys. The leaf cures itch and ring-worm, the bark of this tree is poisonous, and long thin stripes of it, well saturated in the juice or decoction of the bark, is neatly bound round the head of the Sourah's arrow, with which he destroys the largest animals.

Korra, Uria. Mushidi chettu, Tel. Strychnos nux vomica. Extreme height 45 feet, circumference of trunk 4 feet, height from ground to first branch 18 feet. Wheels, ploughs and many other things are made out of this timber.

Korunjoo, Uria. Kagoo chettu, Tel. Pongamia glabra. Extreme height 36 feet, circumference of trunk 4 feet, height from ground to first branch 20 feet. Oil is extracted from the fruit of this tree, which is a remedy for itch: it is also burnt.

Kosee, Uria. Briedelia retusa? Extreme height 45 feet, circumference of trunk 4 feet, height from ground to first branch 20 feet. Used in the construction of houses generally.

Koeto, Uria. Vellaga chettu, Tel. Feronia elephantum. Extreme height 50 feet, circumference of trunk 5 feet, height from ground to first branch 9 feet. This wood is manufactured into bandy-wheels, and its gum also is in request for many purposes.

Kotoko, Uria. Endupa chettu, Tel. Strychnos potatorum. Extreme height 40 feet, circumference of trunk 4 feet, height from ground to first branch 10 feet. This wood is used to make ploughs and bandy-wheels; the seeds are sold in the bazar and used to clear muddy water.

Kubate, Uria. Grouhonee, Tel. Extreme height 80 feet, circumference of trunk 6 feet, height from ground to first branch 12 feet. Affords good planks, but is little used, the bark is given in diseases of the stomach.

Mahalimboo, Uria. Melia azedirach. Extreme height 70 feet, circumference of trunk 4 feet, height from ground to first branch 20 feet. Not much used, but the fruit and bark are considered remedies for fever.

Minjharee, Uria. Extreme height 43 feet, circumference of trunk 4 feet, height from ground to first branch 6 feet. A very common tree, wood light and used in various ways, where strength is not required.

Mohooloo, Uria. Ippa, Tel. Bassia latifolia. Extreme height 70 feet, circumference of trunk 7 feet, height from ground to first branch 33 feet. This wood is made into boats or canoes and used by the fishermen. Collectors of the water lily leaves and flowers on all the large tanks in the country gather its flowers and leaves. The Kimedy people always eat off this leaf, and offer the blossom in their temples. A very intoxicating liquor is made from the Mohooloo blossom, which is also sold in the bazar as a sweetmeat when mixed with other ingredients. The unripe fruit is made into curry, and greatly esteemed.

Moondomonde, Uria. Nauclea parvifolia. Extreme height 50 feet, circumference of trunk 4 feet, height from ground to first branch 20 feet. This tree is scarce, and little used for any purpose.

Nerasoo, Uria. Ali chettu, Tel. Extreme height 25 feet, circumference of trunk 2 feet, height from ground to first branch 8 feet. Used to erect village houses and as firewood.

Noomaree, Uria. Antidesma diandrum. Extreme height 30 feet, circumference of trunk 3½ feet, height from ground to first branch 6 feet. Used to erect village houses and as firewood.

Oshoko, Uria. Asoka chettu, Tel. Extreme height 45 feet, circumference of trunk 3 feet, height from ground to first branch 9 feet. Made into charcoal and used as firewood.

Patoowa, Uria. Karubalasu chettu, Tel. Randia dumetorum. Extreme height 15 feet, circumference of trunk 1 foot, height from ground to first branch 4 feet. Used to erect village houses and as firewood.

Patrokoorwan, Uria. Holarhena antidysenterica. Extreme height 20 feet, circumference of trunk 1 foot, height from ground to first branch 5 feet. The seeds of this tree are collected with great care, as it forms one of the principal medicines of the country: the bark and leaves are also held in repute for some diseases.

Pausee, Uria. Conocarpus acuminatus. Extreme height 60 feet, circumference of trunk 5 feet, height from ground to first branch 30 feet. A light hard wood used to make presses, wheels, &c.

Pia Saloo, Uria. Maddi or marri chettu, Tel. Pterocarpus marsupium. Extreme height 80 feet, circumference of trunk 5½ feet, height from ground to first branch 20 feet. So great has been the demand for this timber for household building and other purposes, that but few trees are now found within an easy distance of the river banks. It is plentiful in remoter places.

Pitta Kaloochia, Uria. Diospyros sylvatica. Extreme height 33 feet, circumference of trunk 2½ feet, height from ground to first branch 12 feet. Made into charcoal and used as firewood.

Potoobalo, Uria. Nakari chettu, Tel. Extreme height 40 feet, circumference of trunk 3 feet, height from ground to first branch 10 feet. Used to erect village houses and as firewood.

Rayee, Uria. Dillenia speciosa. Extreme height 30 feet, circumference of trunk 3 feet, height from ground to first branch 15 feet. Used in the erection of village houses and for firewood.

Sahada, Uria. Barinika chettu, Tel. Trophis aspera. Extreme height 40 feet, circumference of trunk 2 feet, height from ground to first branch 7 feet. Used in the erection of village houses and as firewood.

Sahajoo, Uria. Terminalia tomentosa. Extreme height 60 feet, circumference of trunk 5 feet, height from ground to first branch 25 feet. A very useful wood and plentiful, it is used in house-building, sawn into planks, and generally burnt into charcoal.

Salora, Uria. Randia longispina. Extreme height 20 feet, circumference of trunk 1 foot, height from ground to first branch 5 feet. Used in the erection of village houses and for firewood.

Salwa, URIA. Guggalapu chettu, TEL. Shorea robusta. Extreme height 85 feet, circumference of trunk 6 feet, height from ground to first branch 33 feet. This is the dammar tree. Only a small quantity of its resin is brought in for sale by the hill men to Kimedy, and that is purchased by the Hindus to burn in their temples. The price of it is Rs. 3 per maund. The seeds are boiled and eaten by the Sourahs when their crops fail, and they also consider them a remedy for bowel complaints.

Sidha, URIA. Lagerstrœmia parviflora. Extreme height 45 feet, circumference of trunk 3½ feet, height from ground to first branch 20 feet. A common wood, of which rafters, &c., are made, the bark is used to tan leather, and the natives ascribe strange medicinal qualities to it.

Sirisee, URIA. Sirissan chettu, TEL. Albizzia lebbek. Extreme height 60 feet, circumference of trunk 4½ feet, height from ground to first branch 25 feet. A light hard wood, used to make presses, wheels, &c.

Sisoowa, URIA. Yeridi chettu, TEL. Dalbergia (latifolia)? Extreme height 40 feet, circumference of trunk 4½ feet, height from ground to first branch 16 feet. A most useful wood, being that used in the manufacture of every description of household furniture.

Sohn, URIA. Somide chettu, TEL. Soymida febrifuga. Extreme height 50 feet, circumference of trunk 5 feet, height from ground to first branch 12 feet. A very heavy wood, and so hard that white-ants make no impression on it. Little use is made of this valuable timber in consequence of the Ooriah superstition that bad luck attends to its use in any but sacred buildings; its bark has astringent qualities, and is used for tanning and medicinally.

Soonaree, URIA. Nelli chettu, TEL. Cathartocarpus fistula. Extreme height 25 feet, circumference of trunk 3 feet, height from ground to first branch 9 feet. Plough-shares are made of this wood: the fruit is given as an astringent in bowel complaints.

Soondoragoonde, URIA. Vassantagoonda chettu, TEL. Rottlera tinctoria. Extreme height 15 feet, circumference of trunk 2 feet, height from ground to first branch 5 feet. The fruit of this tree yields a dye which is sent for sale to Berhampore in small quantities.

Tanghany, URIA. Tangadu chettu. Extreme height 40 feet, circumference of trunk 3 feet, height from ground to first branch 15 feet. Used in building, for firewood and charcoal.

PUTRANJIVA ROXBURGHII, *Wall., Roxb. Fl.*

Nagaia putranjiva, *Roxb. Fl. Ind., III*, 767.

Jiapota, HIND. of Panjab.
Putajan. „
Jootee. „
Jewun-pootr. MAHR.
Kurroopally maram. TAM.
Kudra Juva. TEL.

This tree grows in the hot drier parts of Ceylon: on the mountains of the Coromandel coast, in the N. Arcot hills, in the Concan, in the ravines at Nagotnah and Khandallah: in the Kennery jungles, at Salsette, in the jungles to the north and east of Belgaum, in the Konkans, Sylhet, Assam and Oude, in the moist forests of Kumaon on the Siwalik hills, and is common along the foot of the Himalayas. Dr. Wight had not seen this tree in Coimbatore, Dr. Roxburgh describes it as a large timber tree with an erect straight trunk, and with wood white, close-grained and very hard. Dr. Gibson tells us it is not common as a forest tree on the Bombay side, and is found only in the coast jungles. He had never seen it of any size, but the wood, hard, strong and durable, is good for turnery and for implements. The nuts are threaded as necklaces and amulets.—*Roxb., Voigt, Drs. Wight, Gibson and J. L. Stewart, Major Beddome, Messrs. Powell, R. Thompson and Fergusson.*

PYAUNG-PYION, BURM.? In Tavoy, a compact, heavy, yellow wood.—*Mr. Blundell.*

PYEEN-MA, BURM.? In Amherst, a timber used for house posts, carts, boats, paddles, oars, &c. It is a capital wood, a kind of saul? and would answer for all the purposes of common saul; specific gravity 0·920.—*Cat. Ex.* 1851. (*Note.*—Is this the Lagerstrœmia? the Peemah?)

PYENG-KHADO, BURM.? In Tavoy, a small-sized, heavy, close-grained, red wood.—*Mr. Blundell.* (*Note.*—Is this the Inga xylocarpa?)

PYGEUM ACUMINATUM. Scarce, but found on the banks of streams in the Toungoo district attaining a girth of five or six feet. Wood red and adapted to cabinet-making.—*Dr. McClelland.*

PYGEUM CEYLANICUM, *Gærtn.*

Gal-mora-gaha. SINGH.
Kankoombala-katteya-gass. SINGH.

This is a moderate-sized tree of the moister parts of Ceylon, growing at an elevation of 3,000 feet. It also grows on the Neilgherry Hills. Its wood is red-coloured and adapted for cabinet purposes.—*Thw. Mr. Fergusson, Major Beddome.*

PYGEUM WIGHTIANUM, *Blume.*

Gal-mora.gaha. SINGH.
Oonoonoo-gass. SINGH.

A middle-sized tree, growing at an elevation of 4,000 to 8,000 feet in the central province of Ceylon.—*Thw.*

PYRULARIA WALLICHIANA, *A. D. C. Prod. XIV*, 629.

Sphœrocarya Wallichiana, *W. Ic.*, 241.
Pyrularia Zeylanica, *DC.*

Katu-pamburu. SINGH.
Iddu mulla. TAM. of Ceylon

This large tree has a very thorny trunk: it grows in the Central Province of Ceylon at 4,000 to 6,000 feet of elevation, and it grows

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als[illegible] the Western Coast of the Peninsula of India, at Manantoddy and in Coorg. Its wood is light-coloured, and the cross section curiously grained. It is used for ordinary works.—*Wright, No. 28, quoted by Mr. Fergusson, Major Beddome.*

PYRUS AUCUPARIA.

Battal of Kaghan.

The tree closely resembles, if it is not identical with the mountain ash, or "rowan" of England and Scotland.—*Mr. Powell, Hand Book, Econ. Prod., Panjab, p.* 591.

PYRUS BACCATA. Crab Apple.

Banmehal of Pulu. | Choda of Hazara.

Wood hard and tough. Fruit eaten.—*Mr. Powell, Hand Book.*

PYRUS COMMUNIS. Pear Tree.

Naspati. | Nak or Nakh.

Wood good for carving ; procurable from 6 to 10 inches in diameter, but rare.

PYRUS KUMAONENSIS.

Dodar of Murree Hills, Kaghan, &c.
Chotta of Kaghan.
Maul of Chenab.

Doubtless beyond the Chenab, from there being a Pushtu name for the tree. The small fruit ripens about October and looks well, but is very indifferent eating even when half rotten, in which state it is generally consumed by the natives.—*Drs. Cleghorn and J. L. Stewart, Mr. Powell.*

PYRUS MALUS; *Linn.* Apple Tree.

Seb or Palu or Seu. Hind.
Chu-i of Pangi.
Chung, also Chunt of Pangi and Chenab.
Tsunt: Amru: Sim of Kangra.
Sher of Jhelum.
Maura. Pushtu.
Tsunt, Chung; Seu; Kashu of Chenab.
Khaju, Seu ; Cho of Ravi.
Li of Sutlej.
Ku-shu of Ladak.
Mana of Trans-Indus.

Grows wild in the N. W. Himalayas on the Chenab and Sutlej at 5,000 to 9,000 feet, and in Ladak at 11,500. It is also considerably cultivated. Wood inferior to that of the pear tree, but good for cog-wheels and gunstocks.—*Dr. J. L. Stewart, Mr. Powell.*

PYRUS VARIOLOSA, *Wall.* Wild Pear Tree.

Batangi, batank of Jhelum, Murree Hills and Hazara.
Tang, tangi, Shindar of Kangra.
Keint, Kaint, Kithu,
Kiat, gadkuji Keitha; Kent, of Chenab, Ravi and Bias.
Shegul Shogal of Sutlej, Hurdwar and Chamba.
Mahul of Kumaon.

Grows in most parts of the Panjab Himalaya at 2,500 to 7,000 feet up to the Indus. The timber is white, close-grained and tolerably strong, and is used for implements, walking-sticks and native combs.—*Dr. J. L. Stewart, Lt. Col. Lake, Mr. Powell.*

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QUERCUS. The Oak. Oaks are found in the Himalaya, Nepaul, Kumaon and Sylhet, and in many parts of the S. E. of Asia. All travellers in the Himalaya testify to the abundance there of their oaks. The people employed by Dr. Wallich gathered a considerable number of species, and Dr. Royle assures us that they are found from moderate elevations up to the limits of trees. He adds that they are found on the mountains of Sylhet, from the northern to the most southern parts. They grow from moderate elevations, as in the case of Q. incana—from 5,000 to 7,000 feet—to the limits of the forest where Q. semecarpifolia disappears ; but at 10,000 and 12,000 feet, on the southern face of the Himalaya, as at Choor, Kedarkanta and Changshel, the Quercus semecarpifolia generally forms the forests at their highest limits, though other species of Quercus are found below, with Taxus, Betula, Deodara, Pinus excelsa, and morinda. Dr. Hooker tells us that oaks grow in the valleys of the eastern Himalaya, in eastern Bengal, and in the Malay peninsula. No oak nor chesnut, he says, ascends above 9,000 feet in the interior of Sikkim, where they are replaced by a species of hazel (Corylus) ; in the north Himalaya, on the other hand, the *Quercus semecarpifolia* oak is amongst the most alpine trees, and the nut is a different species, more resembling the European. On the outer Sikkim ranges, oaks (Q. annulata ?) ascend to 10,000 feet, and there is no hazel. It is not generally known, he adds, that oaks are often very tropical plants ; not only abounding at low elevations in the mountains, but descending in abundance to the level of the sea. Though almost unknown in Ceylon, the Peninsula of India, tropical Africa, or South America, they abound in the hot valleys of the Eastern Himalaya, East Bengal, Malay Peninsula and Eastern islands ; where, perhaps, more species grow than in any other part of the world. Such facts as this, he remarks, disturb our preconceived notions of the geographical distribution of the most familiar tribes of plants, and throw great doubt on the conclusions which fossil plants are supposed to indicate. The evergreen oaks observed by Mr. Fortune in the Himalaya, were *Q. dilatata, Q. semecarpifolia, Q. sclerophylla* and *Q. inversa*, the last two with large and glossy leaves, not unlike the Portugal laurel at a distance. Captain Gerard tells us of three species of oak in Kunawar, the leaves of all being lance-shaped,

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more or less serrated, and some exactly like holly. They are the Monroo and the Khursoo which grow at 12,800 feet, and the Ban (Q. incana), which disappears at 8,000 feet. Major Benson, writing in British Burmah, remarks that Quercus fenestrata, Q. turbinata, and Q. velutina, produce good, durable, timber, resembling that of the Dillenias in density and elasticity, though the trees do not grow of that size to make the timber of the same value as the Dillenias, "Zinbuin." And the Dillenias are not only valuable as timber trees, but for ornamental purposes. Dr. Mason tells us that Dr. Wallich found seven different species of oak growing in Burmah and on the Tenasserim Coast, all of them yielding useful timber, though inferior to the English oak, and 23 species are named in Japan, but many of the Japanese kinds appear to be peculiar to the Indian Archipelago, or only occur near the south-eastern angle of Asia, where they reach their most southern limits, being scarcely known in a wild state, in the southern hemisphere. Dr. Wight gives, in his Icones, Quercus acuminata; armata; castanicarpa; fenestrata; ferox; lanceæfolia, lappacea; semi-serrata; squamata; turbinata.—*Gerard's Account of Kanawar, p.* 67, *Royle's Ili., Him. Bot., pp.* 17 *to* 345, *Dr. Mason's Tenasserim, Hooker's Him. Jour., Vol. I, p.* 87, *and II, pp.* 114, 436, *Hodgson's Nagasaki, p.* 342, *Dr. O'Shaughnessy, p.* 607, *and Ben. Phar., p.* 217, *Roxb. Fl. Ind., Vol. III, pp.* 633 *to* 641.

QUERCUS, *Species.*

Reen Wood. ANGLO-PUSHTU ?

An ever-green oak, bearing acorns. A tree of the Mehra Forest, near Abbottabad, Hazara. It is a large spreading tree, and supposed to be the American Oak.—*Cal. Cat. Ex.* 1862.

QUERCUS AMHERSTIANA. A large tree of Martaban, used in boat-building. It grows also in Tenasserim and Burmah, and affords useful timber though inferior to English oak.—*Dr. Mason.*

QUERCUS ANNULATA.

Ring-cupped Oak. ENG.
Barano. KAGHAN.
Bren, Bran, Banni. PANJ.
Bani, Bankau, Bankahoo. PANJ.
Indri, Mohru. PANJ.

Grows in Kotgarh, Hazara, and the outer ranges of the Sikkim Himalaya up to 10,000 feet. It is a moderate-sized tree of the rivers of the Panjab Himalaya, growing there at 2,000 to 5,500 feet in sunny situations; the wood is described by Dr. Stewart as white and not valued, but Mr. Powell mentions it as a tough, close-grained wood, used at Rawalpindi for building purposes.—*Dr. J. L. Stewart, Mr. Powell, Lieut.-Colonel Lake.*

QUERCUS CHINENSIS. CHINESE OAK. This beautiful species is found in mountainous places in China, and is said to have exactly the habit and appearance of a Spanish chesnut.—*Eng. Cyc., Royle's Ill.*

QUERCUS DILATATA, *Lindl.*

Q. floribunda, *Lindl,* | Q. taxiflora, *Auctorum.*

Parungi. PANJ.
Barchan. ,,
Berain. ,,
Banji. ,,
Banni. ,,
Margang. ,,
Kali ring. ,,
Karsh. ,,
Maru. PANJ.
Satrun. ,,
Barr of Murree hills.
Barungi of Hazara.
Mohru. PANJABI.
Kere-u of Chamba hills.
Marghand of Kanawar.
Chora of Kaghan.

This large oak grows in the Panjab Himalaya, but is more common in the outer ranges from 4,500 to 9,000 and 10,000 feet. It is however, seldom seen, says Cleghorn, "below 6,000 or above 7,500." In the Western Himalaya it is more rare than the other species, Q. ilex and Q. incana. The leaves of the young tree are covered with prickles, which gradually disappear in the older ones. The tree grows to a huge size. Many specimens may be seen 12 feet in girth, and from 80 to 100 feet high. All the Himalayan species are evergreen, and the leaves of Quercus dilatata especially afford valuable nourishment in winter to sheep and goats. Its wood is the best of all the oaks of the N. W. Himalaya, being hard, heavy, durable and elastic, and is much used for ploughs, axle-handles and house-building; also it is said as jampan poles.—*Dr. J. L. Stewart, p.* 199, *Mr. Powell's Hand-book, Lieut.-Col. Lake's Report.*

QUERCUS FENESTRATA, *Roxb.* Grows in the Khassya hills, is a native of the mountains in the vicinity of Sylhet, and grows in Burmah and the Tenasserim provinces, not fifty feet above the level of the sea. It affords useful timbers though inferior to English oak.—*Major Benson, Dr. Mason, Roxb., Fl. Ind., p.* 633.

QUERCUS FLORIBUNDA.

Barcha of Murree Hills.

Not common but found occasionally at Murree at an elevation of 9,000 feet, its timber is hard and much valued.—*Lieut-Col. Lake's Report.*

QUERCUS ILEX, *Linn.*

Quercus baloot, *Griff.*

Charai. PANJ.
Jari. ,,
Chur. ,,
Irri of Lahoul.
Viru
Khareo
Pargai
Karanja
Kori of Kaghan.
Chitari. PANJ.
Chora of Kaghan.
Chari. PUSHTU.
Kharpalu Cherai
Gwara Cherai
Barungi of Murree hills.
Pangi of Lahoul.
Chola ,,
Balut
Ban. PANJ.
Kathun ban ,,
Bre of Kanawar.
Sprcherei of Kanawar.
Shah baloot. PUSHTU.

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Many of the vernacular names of Q. dilitata and Q. ilex are identical. Dr. Stewart tells us that Q. ilex is common at 3,200 to 8,000 feet in parts of the arid tracts of most of the Panjab rivers, also in the eastern parts of the Suliman range, on the west of the Indus and in the northern part of Affghanistan, and it rises to 10,000 feet on the Safed Koh. But it is still uncertain whether Q. Ilex and Q. Baloot, be identical. Kanawar is its eastern limit. This oak is seen with 5 to 10 feet of girth, and 60 to 70 feet high. It is usually a small rigid tree. The wood is not much valued, but is used for ploughs and handles.—*Dr. J. L. Stewart, Mr. Powell.*

QUERCUS INCANA.

Heavy oak. Eng.
Oak. ,,
Common oak. ,,
Himalayan Ilex. Eng.
Ban of the Himalaya. ,,
Rin of Hazara.
Rinj ,,
Irin. Pushtu.
Sper cherai (or white oak.) Pushtu.
Vuri of Salt Range.

Banji. Panj.
Daghun Ban. ,,
Ring. ,,
Daroo. ,,
Mohru. ,,
Maru. ,,
Munroo of Kumaon.
Banj. Panj.
Kharshu. ,,
Shindar. ,,

This is the commonest of all the oaks in the N. W. Himalaya, particularly in the outer ranges, at elevations of 3,500 to 8,000 feet. According to Lieut.-Col. Lake this tree attains its full size in 100 years, and a very old tree yields a log or trunk to first branch from 16 to 20 feet in length (?) and 6 feet (according to Dr. Stewart, 7 to 9 feet) in circumference; its wood is of a red colour, hard, tough and heavy, coarse-grained, liable to warp and decay if exposed to wet; but lasts, well under cover, and is useful for beams, building purposes and plough handles. In the interior of Kumaon it is a large and valuable tree, common and abundant, and is used for house-building, and is largely used for firewood at the hill sanitaria. Its leaves are given as fodder to cattle.—*Dr. J. L. Stewart, Messrs. R. Thompson, Powell, and Barnes' Kangra Settlement Report, para.* 147, *quoted by Lieut.-Col. Lake, Royle's Ill., Gerard's Kanawar.*

QUERCUS INVERSA, an ever-green oak, of the Himalaya, with large glossy leaves, not unlike the Portugal laurel.—*Fortune.*

QUERCUS LANATA. The Woolly-leaved Nepaul oak, is found wild in the Himalaya, and is one of the hardest oaks yet discovered.—*Fortune.*

QUERCUS LANCEÆFOLIA, *Roxb.* A tree of the Garrow hills and Assam. Wood light-coloured like the English oak but harder and reckoned, where it grows, one of the most durable timbers.—*Voigt. Roxb., Flor. Ind.*, *p.* 634.

QUERCUS LAPPACEA, *Rovb.* A tree of the Khassya mountains. Wood strong, in colour like that of the common oak, but hard and most close-grained.—*Voigt, Roxb. Fl. Ind.*

QUERCUS LUCIDA, *Roxb.*, and Q. muricata, *Roxb.*, are Penang trees.

QUERCUS PRINODES, *Linn.*

Quercus serrata, *Roxb.* | Shingra. Hind.

A tree of the Garrow hills, yields a useful timber.—*Voigt, Roxb. Fl. Ind.*

QUERCUS SCLEROPHYLIA. An ever-green oak of the Himalayas, with large glossy leaves, not unlike the Portugal laurel at a distance.—*Fortune.*

QUERCUS SEMECARPIFOLIA.

Common oak. Eng.
Alpine oak ,,
Ban. Panj.
Banchur of Hazara. Panj.
Jangal Parungi. ,,
Khareo. ,,

Kharao. Panj.
Kharshu of Kanawar.
Kharshui of Kanawar.
Khatau. Panj.
Kereu of Ravi.

Dr. J. L. Stewart tells us that this is the largest of the oaks in the N. W. Himalaya, growing to 60 or 70 feet high, and 7 to 12 and 15 feet in girth. It grows on the rivers there, on the Safed Koh, and west of the Indus at 8,000 to 12,000 feet. Its wood is whitish, hard and heavy, and is one of the best of the timbers furnished by the oaks, but is said to be apt to warp and to be liable to be attacked by insects. It is, he says, used for plough shafts, jampan poles, helves, door frames and for charcoal. Lieutenant-Colonel Lake says its wood is white, soft and light; subject to insects and liable to warp; used for making charcoal, and by zemindars for ordinary house-building purposes; produces also good and large timber. According to Mr. Powell the timber is much esteemed by natives of the Panjab, but as this species occurs near the upper limit of pine forests and is very heavy, it is seldom brought to market. Extensive forests exist on Hattu near Nagkanda. The tree is very tall and straight. Elevation, 9,000 to 11,000. "It seldom grows," says Cleghorn, "below 8,000 feet, and ascends above the range of pines."—*Mr. Barnes' Kangra Settlement Report, para.* 14; *and Balfour, page* 204, *quoted by Lt. Col. Lake, Commissioner, Jhullundhur Division, Dr. J. L. Stewart, Mr. Powell.*

QUERCUS SEMISERRATA, *Roxb.*

Thitkya. Burm.

Grows in the Garrow and Khassya hills and in British Burmah: wood used for plugs or pins to join together the three pieces which compose the body of a Burmese cart wheel. A cubic foot weighs lbs. 48. In a full-grown tree on good soil, the average length of the trunk to the first branch is 20 feet, and average girth measured at 6 feet from the ground is 4 feet.—*Drs. Roxb., Brandis, Voigt.* (*Note.*—Is this Q. prinodes, above ?)

QUERCUS SPICATA, *Buch.* A tree of Nepal, of the Garrow hills, the Khassya mountains and Chittagong. Wood lighter coloured than English oak, but equally close-grained and apparently as strong.—*Voigt.*

QUERCUS TIRBBÆ ? ? Grows in Burmah and the Tenasserim provinces. It affords useful timber though inferior to English oak. (*Note.*—Is Tirb-bæ a Burmese term for one of the oaks ?)

QUERCUS TURBINATA. Grows in Chittagong and in Burmah, it affords useful timber though inferior to English oak. Roxburgh says it is only used for fuel.—*Roxb., p.* 636.

QUERCUS VELUTINA. Grows in Burmah and the Tenasserim provinces. It affords useful timber though inferior to English oak.

R

RABAN. A tree of Jhullundhur of moderate size ; wood white, soft, light ; used by zemindars for their houses and implements. Bark used medicinally ; leaves used for fodder. —*Lieut-Colonel Lake, Commissioner, Jhullundhur Division.*

RACKA NASTA, CAN. ? Stunted teak : a forest term.

RAILWAY SLEEPERS. Railway operations in India are largely thinning the forests near which the lines run ; and, as these roads are projected over a large part of India, it may be of interest to mention the experience acquired at Madras. At one time, it was thought that the forests of the south of India would furnish numerous timbers suitable for sleepers ; and the following, 22 in number, were the woods of highest promise, viz :—

Tectona grandis, Teak.
Shorea robusta, Saul.
Dalbergia sissoo, Sissoo.
Pterocarpus Indicus, Pedowk.
Zizyphus glabrata, Kurkuttah.
Terminalia glabra, Karra marda.
Terminalia alata, Maruthi maram.
Hardwickia binata, Acha maram.
Pterocarpus marsupium, Vengay maram.
Terminalia chebula, Kadukai-maram.
Nicani maram.
Myladi maram.
Soymida febrifuga, Som maram.
Acacia odoratissima, Karroo vangay : also, Chella woongay maram.
Prosopis spicegera, Perumbay maram.
Inga xylocarpa. Irool, Erool, or Eroovaloo maram.
Acacia speciosa, Vel-vangay maram.
Artocarpus integrifolia, Pila maram.
Bassia longifolia, Dud eloopa maram.
Acacia Arabica, Karu-velam maram.
Kombadri.
Katu-voye maram.

But these hopes have not been fulfilled ; no timber used has been found capable of resisting the combined effects of the heat and moisture of the south of India, and only on the woods of three trees, the Erool, *Inga xylocarpa*; Karra marda, *Terminalia glabra*; and Vengay, *Pterocarpus marsupium*, is any great reliance now placed, and iron sleepers were soon very extensively in use on the Madras line. Taking an average of the various woods used on this line of rail road, the duration of its sleepers has been about 3½ years, and annually about 340 sleepers per mile were required to be replaced. On these points, Mr. Pinson, Acting Chief Engineer, in a letter to the Agent and Manager, dated 14th August 1862, furnished the result of the experience upon the 1st or Madras Division of the south-west line, in the form of the following statement, which gives the average lives of sleepers of various woods, taken out of the line in a state of decay, and replaced by iron pot sleepers, up to the present date :—

Distinguishing mark.	Names of woods.	Average life.			
A.	Aucha..................	4	years,	7	months
F.	Kurrah murdah......	3	,,	10	,,
C.	Combadrie............	4	,,	2	,,
K.	Cadookoy.............	4	,,	1	,,
S.	Saul.....................	4	,,	2	,,
E.	Dud cloopay..........	3	,,	10	,,
Y.	Eroovalaoo............	2	,,	8	,,
V.	Vangay..................	4	,,	3	,,
P.	Paulay...................	2	,,	10	,,
R.	Auray....................	2	,,	6	,,
M.	Myladee.................	1	,,	6	,,
H.	Myroothy...............	4	,,	3	,,
D.	Katvoy..................	4	,,	4	,,
B.	Karavalum.............	4	,,	2	,,

The general average, therefore, has been 3 years and eight months. Erool, was expected to turn out to be the best description of wood for sleeper purposes. He adds that the creosoted sleepers of Baltic fir, which had been received from England from time to time, had been, as a rule, exceedingly durable. Recently, there was occasion to take some decayed ones out of the line near Sholinghur, which were ascertained to have been in the road for a period of nearly 6½ years. But the cost of such sleepers, he remarks, interferes materially with their extensive use in this country. The prices paid for sleepers for the Madras railway ranged, according to the various woods, from Rs. 1½ to Rs. 3, for timbers of the south of India ; but those of Burmese and Australian woods cost Rs. 5 : and, where timber sleepers are used, there must be added the cost of two chairs, say annas 14. But, a pair of iron sleepers, with fittings complete (answering to one timber sleeper), delivered in Madras, cost about Rs. 7-8 ; and, while the cost of labour in laying an iron road is much less than for a wooden one, and the labor cost of its maintenance also much less, the duration of the iron road is greatly longer than that of a road of any of the woods, as hitherto tried. Several years ago, I expressed my conviction that if mining and smelting operations were ever to be carried on with activity, the most extensive forests in India would diminish and disappear ; and the experience just detailed shows that, as the operations have, hitherto, been conducted, the forests are not inexhaustible even for railway purposes, and leaves the impression that there are no woods in India which can compete with a road on iron pot sleepers. From the correspondence, on this subject, elicited in consequence of Major Morgan's remarks in his forest report for 1860-61, it would also appear that the success of the iron sleepers on the Enniskillen and Londonderry railway, has been most favourable ; and, on the Egypt line, where they use Greaves' cast-iron, pot, bell, or cup sleepers, for it has all these appellations, the success of that kind of road, in an alluvial soil, has been unquestionable. In the report alluded to, Major Morgan added that one cause of wooden sleepers not lasting, is that under the chair a hollow forms, in which water lodges and causes rapid decay, and he thinks that a small piece of galvanised sheet-iron fitted over the part, would prevent the formation of a hollow. But, Mr. Smart has replied that the wood sleepers give way not only under the chair but everywhere else. From this remark, and from the longer lives of the Baltic fir sleepers, it would seem that in using the woods of this country, one defect, for the sleepers of the Madras line, has been insufficient seasoning. I have never heard that the timbers of the country have been stored for years, to allow their juices to escape : but, so far as is known, soon after the trees have been felled, they have been laid on the ground as sleepers, and no known timber could withstand so severe a trial. It requires 3 to 5 years' seasoning to render green wood fit for use, and at least two years should have been allowed for seasoning, before any use, whatever, was made of the timbers of the countries—perhaps, the Baltic fir alone, of all the timbers that have been tried, was seasoned wood. With our present knowledge, it would be wrong to condemn the many valuable timber trees of this country, or to assert that Baltic fir can possibly compete with them.—*Beresford Anderson, Esq., Engineer, Madras Railway, MSS., John A. Pinson, Esq., in Records of Consulting Engineer, M. R., R. B. Elwin, Esq., Manager, in Records of Consulting Engineer, Madras Railway, favoured through Captain Prendergast, Royal Engineers, W. G. Smart, Esq., Chief Engr., Henry J. Rouse, Esq., in Proceedings of Madras Government, Dr. Cleghorn's Reports on the Forests, Major Morgan in Madras Conservator's Report, Balfour's Report on the Iron Ores of the Madras Presidency, Madras,* 1855.

RAJAHMUNDRY WOODS. The following woods were sent from this district to the Great Exhibition of 1851.

Karra కర్ర in Telugu, meaning " wood"

Acacia cinerea, యెలుతురి కర్ర Yeluturi karra.

Agisti karra అగిస్తి కర్ర.

Alangium hexapetalum, ఊడుగ కర్ర Uduga karra.

Auneng karra. అనేగ కర్ర.

Artocarpus integrifolia, పనస కర్ర Panasa karra.

Azadirachta Indica, వేప కర్ర Vepa karra.

Bassia latifolia, యిప్ప కర్ర Ippa karra.

Bombax malabaricum or heptaphylla, బూరుగ కర్ర Boorooga karra.

Careya arborea, కంబ కర్ర Kamba karra.

Cassia auriculata, తంగేడు కర్ర Tangedu karra.

Chloroxylon Swietenia, బిల్ల కర్ర Billa karra.

Cordia myxa, నక్కేరు కర్ర Nakkeru karra.

Cratæva, వులిమిడితీగె Oolimidi-tige.

Cratæva Roxburghii or tapia, తెల్ల వులిమిరి కర్ర Tella oolimiri karra.

Diospyros chloroxylon, నల్ల వులిమిరి కర్ర Nalla Oolimiri karra.

Diospyros montana ? యిరుగుడు చావ కర్ర Irugoodu chava karra.

Diospyros melanoxylon, తుమ్మిద చావ కర్ర Tummida chava karra.

Erythrina Indica, బాడిదె కర్ర Badide karra.

Feronia elephantum, వెలగ కర్ర Velaga karra.

Ficus racemosa, బొడ్డ కర్ర Bodda karra.

Ganara karra, గనర కర్ర.

Gata karra, గాత కర్ర.

Gmelina arborea, గుమ్మడు కర్ర Gummudu karra.

Isakarasi karra. యిసకరాశి కర్ర

Mangifera Indica, మామిడి కర్ర Mamidi karra.

Mimusops elengi, పగడుపు కఱ్ఱ Pagadupu.

Morinda citrifolia, తొగరు కఱ్ఱ Togaru karra.

Nauclea cordifolia, దాదుగ కఱ్ఱ Daduga karra.

Nauclea purpurea, బొగడ కఱ్ఱ Bogada karra.

Odina wodier, గుంపెన కఱ్ఱ Goompena karra.

Penemu karra, పెనెము కఱ్ఱ.

Paya karra, పాయ కఱ్ఱ.

Pentaptera tomentosa, నల్లమద్ది కఱ్ఱ Nalla maddi.

Pentaptera glabra, తెల్లమద్ది కఱ్ఱ Tella maddi.

Pongamia glabra, కానుగ కఱ్ఱ Kanuga karra.

Pterocarpus marsupium, యేగిశ కఱ్ఱ Yegisa.

Pterospermum Heynii ? లోలు కఱ్ఱ Lolu karra.

Rottlera tinctoria, పొన్న కఱ్ఱ Ponna karra.

Sapindus emarginatus, కుంకుడు కఱ్ఱ Koonkudu karra.

Swietenia febrifuga, సోమిద కఱ్ఱ Somida karra.

Spondias mangifera జాదుమా మిడికఱ్ఱ Jadu mamidi karra.

Strychnos potatorum, ఇందుగకఱ్ఱ Indooga

Syzygium jambolana, నేరేడు కఱ్ఱ Neredu.

Tada karra, తడ కఱ్ఱ.

Teli karra. తెలి కఱ్ఱ.

Thespesia populnea, గంగరావి కఱ్ఱ Gangaravi karra.

Vatica tumbuggaia ? గుగ్గిలపు కఱ్ఱ Googgilapu karra.

Vandooroo karra. వందురు కఱ్ఱ

Wrightia antidysenterica, అంకుడు కఱ్ఱ Ankudu.

Zizyphus jujuba, రేగు కఱ్ఱ Regu karra.

RAJAW ? A plentiful tree of Akyab. It is a small wood, used in house-building.—*Cal. Cat. Ex*. 1862.

RALL, OR ROSIN TREE. Sir Richard Jenkins, in his report on the Nagpore territory, states that the Rall or Rosin tree, as also other large wood, is obtained in the forests of Kakir (probably Conkair) and in the hills north of Ruttenpore. When Captain Sankey visited the Pachmurra range, Dr. Jerdon and he met with the "Vatica tumbugaia" which is probably Sir R. Jenkin's "Rall tree," though in those jungles, it does not seem to attain a large size.—*Captain Sankey.*

RAMBABHA ? A very plentiful tree of Akyab which grows to a large size, and is sometimes used for planks.—*Cal. Cat. Ex.* 1862.

RANDIA, *Species.*

Nalla Manga, Tel. of Circars.

A good-sized, armed tree, of this genus is found in the Godavery forests : furnishing a very hard and close-grained wood, good for turnery.—*Captain Beddome.*

RANDIA DUMETORUM, *Lam.*

Gardenia spinosa, *Linn.*
Posoqueria dumetorum, *Roxb.*
Ceriscus malabaricus, *Gærtn.*
Canthium coronatum, *Lam.*
Gardenia dumetorum, *Retz.*

Jooz-ul-kuch.	Arab.	Mandloo of Kumaon.	
Bush-Randia.	Eng.	Manule	,,
Muen-phal ka-jhar.	Hind.	Maru karang.	Tam.
Myn.	Hind.	Madu karray maram.	Tam.
Gehela.	Mahr.	Manda.	Tel.
Mindhal.	Panjabi.	Manga.	,,
Rara.	,,		

This shrub or small tree, thorny and branching, is met with in the hotter parts of Ceylon, and in Coimbatore where it seldom exceeds the size of a large shrub ; it is one of the most common trees of the Bombay forests, but there the wood never reaches any size, though it is strong, hard and close-grained. It grows, also in Guzerat and northwards in the Dehra Dhoon ; in the Kheree Pass, the lower Siwalik hills as far west as the Ravi, and it there has 4 feet of girth, but its wood is not much valued. In Kumaon it is a thorny scrubby shrub in dry forests and open lands, and its wood is white, fine-grained and heavy, but is said to crack readily, if insufficiently seasoned. It is, however, said to be suitable for engraving. The fruit is used in Malabar to poison or intoxicate fish, which are still considered good for eating.—*Drs. J. L. Stewart, Wight and Gibson, Messrs. Powell and R. Thompson, Voigt, Thwaites, O'Shaughnessy.*

RANDIA LONGIFLORA, *Lam.*

Posoqueria longiflora, *Roxb*
P. multiflora, *Bl.*
Gardenia ,, *Willde.*

A tree of Chittagong and Penang with large flowers, white the first day, but on the second, becoming yellow. Wood not known. —*Roxb.* i, 716, *Voigt.*

RANDIA LONGISPINA, *DC.*

Gardenia longispina, *Roxb.*
Posoqueria ,, *Roxb.*

Rara of Amritsar.	Thonaro of Kumaon.
Thunella of Kumaon.	

Grows in the peninsula, in Khandeish and Dehra Dhoon. Mr. R. Thompson of Kumaon, Assistant Conservator of Forests, says that this occurs in Kumaon and grows to a height of 15 feet, with a girth of 2 to 3 inches.

Its wood is finer and more adapted for engraving than R. dumetorum.—*Roxb.* i, 716, *Voigt*, 381, *Messrs. Thompson and Powell.*

RAN-FANNAS, MAHR.

Artocarpus sylvestris ?

A tree of the Bombay forests.—*Dr. Gibson.*

RANGHA-AS ? A Penang wood, of a light-brown colour, used for furniture.—*Col. Frith.*

RATA, a New Zealand tree of the Myrtle family, which commences as a climber and gradually destroying the tree around which it twines, becomes at last a timber tree, 30 or 40 feet high and 8 to 10 feet in circumference. Its wood is hard, tough, of a dark-red colour, not so heavy as the Kaeta-towa, and is used by the natives for making their war clubs and paddles, and for ship-building and other purposes.—*Bennett's Gatherings, p.* 416.

RATAN KHAUR, HIND.? A tree of Chota Nagpore, furnishing a hard, white timber.—*Cal. Cat. Ex.* 1862.

RAUNG-THMOO, BURM.? A wood of Amherst, said to be a kind of teak. It is used for house posts.—*Cal. Ex.* 1861.

RAY, HIND.? A tree of Chota Nagpore, furnishing a hard timber.—*Cal. Cat. Ex.* 1862.

RAYEE, TEL.? Dillenia pentagyna. A tolerably plentiful tree of Ganjam and Goomsur, which attains an extreme height of 30 feet and a circumference of 3 feet. The distance from the ground to the outer section of the first branch is 15 feet. It is only used for firewood.—*Captain Macdonald.*

RED WOOD. This, like the ebonies, the iron woods and rose woods of commerce, is a term applied to the woods of different trees, and many nations have a wood to which this English term is applied. Amongst others may be mentioned the Asiatic Red-woods from the Colubrina Asiatica, and Soymida febrifuga.

Red wood of Japan,

Fa-ang. JAP.
Tsiampan. JAP.

is a product of Coy or Kiu, in Thunberg's time, belonging to the king of Siam. It was also obtainable in Bambilisgo on the coast of Cambodia and from Bimer island, between Bali and Timor. It was imported into Japan, where, Thunberg remarks "this wood rubbed with some lime and water, yields the finest violet colour we could wish to see."—*Thunb., Hist. of Japan, Vol. I, pp.* 42-43. (*Note*—Is it the Pterocarpus santalinus or the Caesalpinia sappan? "Useful Plants" gives *Tsjapangam* as Malealum of C. sappan.)

Red dye wood. A wood of this English name occurs in the Vizianagrum zemindary. (*Note*—Is this the red sanders wood, the Pterocarpus santalinus ?)

Red wood. A wood of this English name occurs in Penang where it is in general use for furniture. Its colour is red, and its specific gravity 1,000.—*Col. Frith.* (*Note*—Is it a Pterocarpus ? marsupium ? Wallichii ? or dalbergioides ?)

RENGA, TEL. Zizyphus jujuba.

REPTONIA BUXIFOLIA, *A. DC.*

Edgeworthia Falconeri.

Gurgura. Panjabi of Salt Range.
Garar. "
Gurgara. Panjabi of Salt Range.

This is exclusively a Panjab tree, common in the Trans-Indus districts. It is a small tree rising to 2,000 and 3,000 feet on the hills west of the Indus. Its wood, though small, is hard, strong, fine-grained and useful.—*Dr. J. L. Stewart, p.* 135, *Mr. Powell.*

RHAMNUS PURPUREUS, *Royle.*

Kari, mimarari of Chenab.
Kunji tundhe, &c., of Ravi.
Chaterni of Sutlej.
Tadru of Jumma.

Mr. Powell gives this as a Panjab tree.

RHAMNUS VIRGATUS, *Roxb.*

Phipni of Kaghan.
Wurak. PUSHTU.
Dadru, dadur, of Hazara and Murree.

This tree grows in the Neilgherries, Mussoori, Gurhwal, Dehra and Kumaon. It is a scarce tree of Hazara, Murree and Kaghan in the Panjab. Wood is very hard and heavy, of a red-brown colour, small, but useful for ornamental purposes.—*Mr. Powell.*

RHIZOPHORACEÆ. "Of this order the genera "Rhizophora," "Bruguiera," Kandelia "Ceriops" and Carallia form the chief plants composing the "*Mangroves,*" which are natives of the salt marshes of the tropics. Sixteen species occur in China and the East Indies. The timber of some is used in common house-building, and the barks of others are the chief ingredients in tanning and dyeing country leather."—*Voigt*, 41, *Mr. Fergusson.*

RHIZOPHORA, *Species.*

Leafy mangrove. ENG.
Kadol. SINGH.

This mangrove is found in the western and northern provinces of Ceylon, chiefly near the mouths of the rivers. The wood weighs lbs. 65 to the cubic foot, and is used for common house-building purposes. It is calculated to last 20 years. A dye is extracted from the bark, and is used for colouring leather, nets, sails, &c.—*Mr. Adrian Mendis.*

RHIZOPHORA, *Species.*

Hiri-koddol, SINGH.

This mangrove grows in the western and northern provinces of Ceylon, and is used for common house-building purposes. A cubic foot weighs lbs. 49, and it is estimated to last 35 years. A dye is extracted from the bark.—*Mr. Adrian Mendis.*

RHIZOPHORA CONJUGATA. *Linn., Lam.*

Rhizophora candelaria, *D. C.* ; *W. & A.*; *Blume.*

A small tree of the salt-marshes of Ceylon, Cochin, Quilon, Malabar, Tenasserim and Java.—*Thwaites, p.* 120, *Voigt, p.* 41.

RHIZOPHORA MUCRONATA, *Lam.*; *W. Ic.*

R. mangle, *Linn.*; *Roxb.* ?
,, candelaria, *W. & A.*
R. macrorrhiza, *Griff.*

Bhora. BENG.
Oopupoma ,, Qu: uppuponna?
Manggi-manggi? MALAY.
Kaya api api? ,,
Pukandel. TAM.
Adavi ponna. TEL.
Pukandel. ,,
Uppu ponna. ,,

Grows in Madagascar, Mauritius and Arabia, at Trincomalie, Calpentyn, Negumbo and other parts of the Ceylon coast, along with R. conjugata,—also in Malabar, the Sunderbunds, Tenasserim and Java. The wood is dark-reddish, hard and durable. The flowers are large, white and sweet scented. Bark used for tanning.—*Voigt, p.* 41, *Thw., p.* 120.

RHODODENDRON ARBOREUM, *Sm.* *W. Ic.*

R. puniceum, *Roxb.*
R. purpureum, *Buch.*

Bras of Chamba hills, &c.
Brah. PANJABI.
Barauns. ,,
Chachiyon of Kangra hills.
Ardawal of Hazara and Murree.
Urval of ,, ,,

This tree, one of the Ericaceæ, grows at about 5,000 feet and upwards on the Neilgherry hills and on all the hills on the western side of the Peninsula of India. It also grows in Nepaul, Kumaon and the Himalaya, at from 6,000 to 8,000 feet. Its wood is coarse, brittle and brown in colour, and little used except for fuel and charcoal, though occasionally for native houses. It is not obtainable of large size ; it may, however, be had for posts, &c., as large as 6 inches in diameter. It is used also for gun-stocks. The bright red flowers are sub-acid, and are made into jelly. —*Roxb.*, ii, 409, *Voigt*, 333, *Mr. Powell. Major Beddome, Lt.-Col. Lake.*

RHODODENDRON CAMPANULATUM. The Alpine rhododendron.

Chamresh or simbar.
Simrang of Kanawar.

Grows on the Western Himalaya at the very high elevations of from 10,000 to 14,000 feet. Wood small and crooked, but is an excellent fuel. The leaves of this species are very highly stimulant and are used as snuff, under the name of Kashmiri patte.—*Dr. Cleghorn, Mr. Powell.*

RHODODENDRON LEPIDOTUM.

Talsar. PANJAB.

Growing at a similar elevation as R. campanulatum and has the same properties.—*Dr. Cleghorn, Mr. Powell.*

RHUS, of this genus about fourteen species occur in the East Indies. The genus includes some true poisons, as R. venenata, perniciosa, radicans and toxicodendron ; and, though most are inodorous, others, R. suaveolens and aromatica, exhale a pleasant odour ; while some of the species have acid berries as R. coriaria ; bucki-amela and Schinus molle. Also Rhus cotinus or Red sumach, has wood, called young fustick, which, as well as the berries, is astringent, and R. coriaria, known in India as in Europe, by the name of Sumach, and as a powerful astringent, is chiefly employed in tanning leather, but also in Indian medicine. The seed of R. parviflora, tuntereek, is frequently substituted in India for that of the sumach. R. glabra is considered a febrifuge. Rhus vernix, a Japanese tree, exudes a whitish resinous juice, which soon becomes black in the air. R. succedania and vernicifera, both common to the Himalayas and Japan, are said, in the latter, to yield a similar product. Species of other genera of the Terebinthaceæ, as of Schinus, contain a resinous matter.—*Royle's Ill. Him. Bot., p.* 179.

RHUS ? *Species ?*

Coongilliya maram. TAM.

Dr. Wight remarks, regarding this Coimbatore wood, that it is the Choloroxylon dupada of Buchanan and Ainslie, an undescribed name and, judging from the leaves, one not required, which are clearly those of a Rhus very nearly allied to Roxburgh's R. buckiamela but distinct. The qualities of the timber are unknown. The outer sap-wood is white, fine grained and heavy, apparently very good.—*Dr. Wight.*

RHUS ACUMINATA, *DC.*

Arkhar of the Beas, Jhullundhur and Ravi.
Arkhol of the Chenab and Kaghan.
Lakhar, Titri of the Chenab.
Kukkur ; kukkiru ; kukur Singhi, Rikul, of the Panjab.
Hurku of Kanawar.
Kakru of Kumaon.

This tree, Dr. Stewart tells us, is not uncommon in the Kashmir valley, but to the eastward it occurs more sparingly, at heights from 4,000 to 7,000 or 8,000 feet. Lieutenant Colonel Lake says that it is found in Jhullundhur chiefly on zemindars' lands, and in some localities attains a great height, and has a good girth. In the Goleir ilaka it yields fine broad planks and beams from 15 to 20 feet long, the price of a full-sized tree being Rs. 7 or 8. Its wood is light-red, somewhat, resembling the toon, hard, fine grained, veined ; polishes well and is well adapted for cabinet-making purposes. Dr. Stewart however, says its wood is not valued. Its fruit is the "Habat ul Khizra" of native medicine, used in phthisis, and Vigne states that the juice of its fresh leaves blisters, which Dr. Stewart did not find the case.—*Lt Col. Lake, Commissioner, Jhullundhur Division, quoting Mr. Barnes' Kangra Settlement Report, para.* 153—*vide Rhus, page* 208, *and Balfour ; Dr. J. L. Stewart, Mr. Powell.*

RHUS APAPE, the Apape of Tahiti, a valuable timber tree of that island, which grows straight without a branch to a height of 40 feet, and to the top of the branches 60 or 70 feet, and is 8 to 10 feet in circumference. Its timber is of a pinkish colour and very durable. A gum resin exudes from the tree. —*Bennett's Gatherings, p.* 400.

RHUS BUCKIAMELA, *Roxb.*

R. amela, *G. Don.* | R. semialata, *β. Roxburghii ; DC.*

Arkhar of Jhullundhur.
Tatri; Titri; Tetar; Chechar, of Jhullundhur, Chenab, Ravi, Sutlej.
Thissa of Jhullundhur.
Arkol, Kokkari of Chenab.
Kakkaran of Ravi.
Vrash, also Knitri of Beas.
Kashin; Kulashin; Washo of Sutlej.

This tree grows in the peninsula of India, but Dr. Gibson says it is not found in the Bombay Presidency. It grows in Kumaon and Srinuggur, is common on all the rivers up to near the Indus, from 2,500 up to 7,000 feet or more. In some places this is called the female of the Odina. The timber is valueless, except for fuel. The fruit is said to be sometimes eaten, and is given for colic. —*Drs. Roxb.* ii, 99, *J. L. Stewart, Wight and Gibson, Voigt, Mr. Powell.*

RHUS COTINUS.

Baghuna of Dera Ismail Khan.
Tung of Kanáwar and Simla.
Larga of Shahpur. PANJAB.
Tung, also Baghuna ; also Larga of Panjab.
Pan of Kaghan.
Pan of Murree and Hazara.

Grows in all the Western Himalayas, but its wood is almost always small, though like the Pistacia and some others of this family, it is a zebra wood. Bark used for tanning.—*Mr. Powell, Dr. Cleghorn.*

RHUS DECIPIENS, *Wight and Arn.*

Filicium decipiens. *Thw.* | Pteridophyllum decipiens, *Thw.*

Pohimbiye. SINGH. | Kattu puvaras maram TAM

This tree grows in the central province of Ceylon and in the south of India. Dr. Wight says it yields a very fine, close-grained, light-coloured wood, and, that the wood, if procurable of good size, must be of considerable value. In Ceylon Mr. Mendis says a cubic foot of it weighs 68 lbs., and it is used there for buildings, lasting 50 years.—*Dr. Wight, Mr. Mendis.*

RHUS MYSORENSIS, *Heyne*. Grows in the barren hills of Mysore, is a scrubby shrub, fit only for firewood.—*Dr. Gibson.*

RHUS PARVIFLORA, *Roxb.* ii, 100.

Tung. PANJABI.

A tree of the Panjab, Nepaul, Kumaon ; growing at 5,000 feet. Wood small but hard and yellow, and excellent for turning.—*Drs. Roxb.* ii, 100, *Voigt.*, 275, *and Cleghorn, Mr. Powell.*

RHUS VERNICIFERA, *DC.*

R. juglandifolia, *Wall.* | R. vernix, *Thunb.*

The varnish tree of Japan, is common in the Himalayas, in Kumaon, Nepaul and Gurhwal. Is poisonous—*Royle, Ill. Him. Bot.*

RICINUS COMMUNIS, *Linn.* CASTOR OIL PLANT.

Bed-i-Anjir. PERS.
Arind ; Harind. PANJAB.
Harnauli of Salt Range.
Irindi. HIND.

Grows all over the south of Asia and in treeless tracts is used as dunnage for flat roofs of native houses. The medicinal castor oil and the lamp oil are expressed from its seeds.

RICINUS DICOCCUS, *Roxb.*

Taw-the-din-bin. BURM.

This grows in Amboyna and in British Burmah, but it is scarce and found only on the banks of streams in the Pegu and Tounghoo districts. It yields a very tall large timber. The wood is red and adapted to cabinet-making.—*Voigt, Dr. McClelland.*

ROHANA, URIA. ? TEL. Soymida febrifuga. A tree of Ganjam and Goomsur, of extreme height 30 feet ; tolerably common and burnt for firewood ; wooden pestles and plough-shares are sometimes made of this wood.—*Captain Macdonald, Major Beddome.*

ROKAM ? A light-red-coloured wood of Penang, used for boxes and furniture.—*Cat. Ex.* 1851.

RONDELETIA TINCTORIA, *McCl.*

Tamayoke. BURM.

In Pegu, a small tree, the timber of which, together with those of Mangifera attenuata, Anacardium occidentale, Zizyphus jujuba, Averrhoa carambola, Picrardia sapota, Ancestrolobus carnea, and Ancestrolobus mollis, are adapted, from the fineness of their grain and elegance of colour, for common work. Its wood is of a dark-brown colour.—*Dr. McClelland, p.* 134.

ROORADEA, URIA. ? A tree of Ganjam and Goomsur, extreme height 12 feet, circumference 1 foot, and height from the ground to the intersection of the first branch 3 feet. The fruit is eaten ; but no use is made of the tree.—*Captain Macdonald.*

RORI, HIND. A tree of Chota Nagpore with hard, white timber.—*Cal. Cat. Ex.* 1862,

ROSEWOOD.

Bois du rose. FR.
Rosen-holz. GER.
Legno rodio. IT.
Pao de rosada. POR.
Leno de rosa. SP.
Yerra goodda-chava curra. TEL.

GSL

Like to iron-wood, blackwood, red-wood this is a commercial term given to the timbers of several trees. Those used in Britain, are produced in the Brazils, the Canary Isles, the East Indies and Africa, and are imported in very large slabs, or the halves of trees which average 18 inches wide. The best is from Rio de Janeiro, the second quality from Bahia, and the commonest from the East Indies : the latter is also called East India Blackwood, although it happens to be the lightest and most red of the three ; it is devoid of the powerful smell of the true Rose-wood, which latter Dr. Lindley considers to be a species of Mimosa. The pores of the East India Rosewood appear to contain less or none of the resinous matter, from which the odour, like that of the flower of Acacia armata, arises. One Rose-wood contains so much gum and oil, that small splinters make excellent matches. The colours of Rose-wood are from light hazel to deep purple, or nearly black: the tints are sometimes abruptly contrasted, at other times striped or nearly uniform. The wood is very heavy; some specimens are close and fine in the grain, whereas others are as open as coarse mahogany, or rather are more abundant in veins. The black streaks are sometimes particularly hard, and very destructive to the tools employed on it. Next to mahogany, it is, in Britain, the most abundant of the furniture woods. A large quantity is cut into veneers for upholstery and cabinet work, and solid pieces are used for the same purposes and for a great variety of turned articles of ordinary consumption. Mr. Poole, in his recent Statistics of Commerce, describes it as a highly esteemed dark-brown coloured, fancy wood, principally used in veneering and making costly furniture. That delivered in England, he says, is imported chiefly from Bahia and Rio de Janeiro, into London and Liverpool. It is in the form of the halves of trees averaging 18 inches wide, and in weight 2½ cwt., called planks, of which the import in 1851 was 2,000 tons. Price, ordinarily, £9 to £19, but rising occasionally to £90 per ton.

The Rose-wood of the Tenasserim provinces, is a very beautiful, hard, compact timber, resembling "Andaman wood," and is occasionally seen in the bazar of Calcutta.

From Siam, a rose-wood is largely exported by the Chinese ; and other places. These woods are generally esteemed according to the degree in which the darker parts are distinct from the purple-red, which forms the ground.

One of the Rose-woods of commerce is the *Lignum Rhodium, Aspalathus.*

The *Chinese Rose-wood,* called by the natives Tze-tan, is odorous, of a reddish black colour, streaked, and full of fine veins, which appear as painted. The manufactures of this wood are more valued in China than the varnished or japanned. There are baser kinds of Rose-wood of inferior value.

East Indian Blackwood or Rose-wood, from Dalbergia latifolia, is an excellent heavy wood, suited for the best furniture. It can be procured in large quantities and of considerable size ; the wood contains much oil, which was exhibited in 1855, by the Ganjam Local Committee. In large panels it is liable to split.—*Faulkner's Commercial Dictionary, McCulloch's Dictionary of Commerce. The Hon'ble Mr. Morrison's Compendious Description, M. E. Jr. Rep., Dr. Mason's Tenasserim, Holtzapfell, Poole's Statistics of Commerce.*

ROTTLERA, a genus of plants named in honour of Dr. Rottler. The species are found in the tropical parts of Asia and throughout India, and amongst them are handsome moderate-sized trees. *R. tetracocca* grows in Silhet, and yields a hard and valuable timber, Rottlera digyna, Thw. (*Chloroxylon digynum,* Wight, Ic. t. 1884—c. p. 2,190), is a small tree growing at Caltura in Ceylon. Rottlera eriocarpa, Thw., grows in Ceylon, in the hot, and drier parts of the island, but is not very common, and Rottlera fuscescens, Thw., another small Ceylon tree, is not uncommon up to an elevation of 2,000 feet. In Ceylon, also, is found R. muricata, *Thw.;* R. oppositifolia, *Blume,* and R. rhombifolia, *Thw.,* all small trees. Major Beddome mentions R. mappoides and R. muricata of the hills in the south of India.—*Thw. En. Pl. Zeyl., p.* 272, *Major Beddome.*

ROTTLERA, *Species.*

Ya-gi-ne. BURM.

A moderate-sized tree of British Burmah, common on the low ground near streams. Breaking weight from lbs. 153 to 170. A cubic foot weighs lbs. 35. In a full-grown tree on good soil the average length of the trunk to the first branch is 30 feet, and average girth measured at 6 feet from the ground is 6 feet. It sells at 4 annas per cubic foot.—*Dr. Brandis, Cal. Cat. Ex.* 1862.

ROTTLERA, *Species.*

Mimasko. BURM. Qu : mimasho ?

A Tavoy tree, represented as furnishing a timber.—*Dr. Wallich.*

ROTTLERA, *Species.*

Keoun lac. BURM.

In Tavoy a large tree, the timber of which is used for rudders.—*Dr. Wallich.*

ROTTLERA DIGYNA, *Thwaites.*

Chloxylon digynum *Wight.* | Otthe. SINGH.

A small tree of the western province of Ceylon and the Anamullay, Coimbatore and

CSL

Malabar hills. Its wood is small and soft, weighs 36 lbs. to the cubic foot, and is little durable, lasting only 10 years, but is used in Ceylon for common house-building purposes. —*Messrs. Mendis and Fergusson, Major Beddome.*

ROTTLERA OPPOSITIFOLIA, *Blume.*

Molabaa. SINGH.

A small tree, growing in Ceylon up to 2,000 feet. Wood used for ordinary purposes. —*Wright, p.* 111, *quoted by Mr. Fergusson.*

ROTTLERA TETRACOCCA, *Roxb.; Fl. Ind., III., p.* 826.

Boo-kanda-gass. SINGH.

Grows in Silhet, Assam and is common up to an elevation of 2,000 feet in Ceylon. It yields a hard and valuable timber.—*Roxb.* iii, 826, *Voigt, Thw. En. Pl. Zeyl., p.* 272.

ROTTLERA TINCTORIA, *Roxb.; Cor. Pl. Rheede.*

Croton coccineum, *Vahl.* | C. punctatum, *Retz.*

Tung. BENG. DUK.
Corunga munje mara. CAN.
Sarnakassary mara. ,,
Shendri. DUK. MAHR.
Monkey-faced tree. ENG.
Kamul. HIND Qu: kamela
Punag. ,,
Tukla. ,,
Kapila. ,,
Reunah of Kumaon.
Ponnagam. MALEAL.
Kambha. PANJAB.
Punnaga. SANS.

Hamparandella-gass. SINGH.
Kapilapodi. TAM.
Chendurapu chettu. TEL.
Sinduri chettu. ,,
Kunkumapuvvu. ,, ,,
Punnagamu. ,, ,,
Vasanta gundu. ,, ,,
Veligaram. ,, ,,
Soondoro-gundi. URIA.?
Koomala-gundi. ,,
Bosonto-gundi. ,,

A tree of moderate size, not uncommon in the hotter parts of Ceylon. Grows also in the northern Circars, in the Dekhan, the inland and coast jungles of the Bombay Presidency, in the forests of northern India, in the Kotah and Mewar jungles, and all over the Panjab. In Ganjam and Goomsur, Captain Macdonald tells us, the "Soondorogoondee, Koomalagoondee, or Bosontogoondee, is of extreme height 15 feet, circumference 2½ feet, and height from the ground to the intersection of the first branch, 5 feet. The tree is tolerably common in the frontier mootahs of Juggernathprasaud, Kurcholy and Coocooloobah, in greater abundance in the Bodogodo jungles, tolerably plentiful about Chotapaud, but far more common on the Bengal side of the frontier, and is said to abound in Boad and Duspullah." It is common in Kumaon and Gurhwal. Colonel Lake says that in the Jhullundhur Doab it is a tree of moderate size: Length of the trunk to the first branch 5 feet, and girth one foot; wood of an earthy colour and of inferior quality, but used by zemindars. Dr. Cleghorn, in M. E. J. R., says the wood is soft and inferior. Dr. Gibson says it is of fair quality when not exposed to wet, and that it is not readily attacked by worms. Its capsules are covered with short stiff hairs; this strigose pubescence when rubbed off has the appearance of a powder of a fine red colour, which is employed in India in dyeing silk of a scarlet colour, and forms an article of commerce'. It is also employed in India as an anthelmintic in the same way that cowhage is, and, like it, probably acts mechanically in expelling the worms.—*Roxb.* iii, 827, *Royle, Him. Bot., Thwaites, Voigt, Flor. Andhr., Captain Macdonald, Eng. Cyc., Drs. Gibson and Cleghorn, Messrs. Fergusson, R. Thompson and Powell, quoting Dr. Cleghorn, Lieut.-Col. Lake.*

ROUMEA HEBECARPA, *Poit.*

Katambilla. SINGH.

A moderate-sized Ceylon tree, at Condasalle, Maturatte, &c.—*Thw., p.* 18.

ROUS. A small tree of the Jhullundhur doab; the wood used for walking sticks.—*Lieut.-Col. Lake, Commissioner, Jhullundhur Division.*

RULINGIA PANNOSA, the Black Currijong of Illawara in Australasia, rises to 20 feet in height. Its wood is soft, its bark is made into nets and fishing lines.—*Bennett.*

S

SAGERÆA LAURINA, *Dalz.*

Gwalteria laurifolia, *Graham.*

A tree of the Concan, Malabar and Coorg, with a valuable red wood and timber.

SAGERETIA BRANDRETHIANA.

Ganger.
Kohjar.

Kohor of Salt Range.

A tree of the Dera Ismail Khan district.

SAGERETIA OPPOSITIFOLIA *Brogn.*

Berchemia oppositifolia, *Wall.*
Zizyphus ,, ,,
Rhamnus trigynus, *Don.*

Girtin. | Mumannai. PUSHTU.

Very common in the Panjab and in Dhera Dhoon, but only useful as firewood. The fruit (mumanai) is well known in the Peshawur bazaar.—*Mr. Powell, Voigt.*

SALIX, the Willow. There are 15 species of willows in India,—5 in the peninsula, 1 in Bengal, 2 from Oude, and the rest in the Himalayas. The earliest mention of the willow which occurs in any composition is to be found in the Pentateuch, where the Israelites were directed, at the institution of the feast of tabernacles, to "take the boughs of goodly trees, branches of palm trees, and the boughs of thick trees, and willows of the brook, and to rejoice before the Lord their God seven days." At a later period, the Psalmist describes the captives as thus lamenting—"By the rivers of Babylon, there we sat down, yea, we wept, when we remembered Zion. We hanged our harps upon the willows in the midst thereof. For there they that carried us away captive required of us a song; and they that wasted us required of us mirth." Dr. Hooker tells us that the willow is not commonly found below 8,000 feet elevation on the Sikkim mountains, where it grows on the inner Himalaya only, and some kinds ascend to 16,000 feet; like the poplars, the willows are valuable for their timber or economic purposes. Dr. Stewart enumerates Salix elegans, *Wall*; S. fragilis, *L.*; S. viminalis, *Linn.*; S. flabellaris, *Ands.*; S. hastata, *L.*; and S. oxycarpa, *Ands.*, as species of willow growing from 5,000 to 11,000 feet in the Panjab Himalaya and in Ladak and Spiti. Their wood is not valued, but some species furnish boards, and from the woods of others, pails, ploughs, cricket bats and combs, and baskets, wattles and weirs are made of the twigs.—*Dr. J. L. Stewart, p.* 209, *John's Forest trees of Britain, Dr. Hooker's Himalayan Journal, Vol. II., p.* 240.

SALIX, *Sp.*

Baddha of Pangi.
Bes. Bais of Hazara.
Shan of Kanawar.

—*Mr. Powell, Hand-book, Econ. Prod., Panjab, p.* 596.

SALIX ALBA, *Linn.*

White Willow.
Chung. PANJ.
Bushan of Upper Chenab.
Madanu or Shan of Kanawar and Pangi.

Dr. Stewart also gives the following names used in the N. W. Himalaya, Panjab, &c.:—

Bis. PANJ.
Yur. ,,
Vwir ,,
Kharwala. PANJ.
Changma. ,,
Malchang; kulchan

There is doubt, he says, as to the species of this tree: but a willow grows at Cashmere, Pangi, Lahoul and Ladak, and in many parts of the Himalaya at 5,000 to 14,500 feet. It is generally planted, and attains a girth of 8 or 9 feet. Its leaves in winter are of value as fodder for sheep. It is used for basket-making, for wattle, for the houses, and for twig bridges in Spiti, Ladak and Zanskar, and in Thibet the whole plough except the point is generally made of willow: pails and combs are also made of its wood, and in Thibet and Spiti it is employed for boards.—*Dr. J. L. Stewart, p.* 216, *Dr. Irvine's Medical Topography, p.* 210, *Royle's Ill., Him. Bot., p.* 343.

SALIX BABYLONICA, *Linn.*

Weeping willow. ENG.
Bis willow. ,,
Bed-i-majnoon. HIND.
Khilaf-i-balkhi. HIND.
Sail-i-majnoon ,,
Willa, khar willa. PUSHTU.

Dr. Stewart also gives the following names:

Bisa. PANJ.
Bidai. ,,
Bitsu. ,,
Bada. PANJ.
Wala. ,,
Katira. ,,

A small tree of Greece, Asia Minor, Turkish Arabia and Nepaul. It is cultivated in gardens at Ajmir and Calcutta, and is as common in gardens in northern India as, also, is S. Ægyptiaca. This tree is common in the plains throughout the Panjab, and westwards in Kashmere, up to 5,500 feet on the hills, and trees with girth of 12 feet are to be seen. Both this and S. tetrasperma are abundant at Peshawar and in the Hazara district. Its branches and twigs are largely used for baskets, wattles and weirs. The large wood is used for cricket bats.—*Voigt, Roxb.* iii, 754, *Dr. J. L. Stewart, p.* 207.

SALIX CAPREA, *Linn.*

Khwaga wala. PUSHTU.
Bed-i-mushk. PERS.

Cultivated at Lahore, Peshawar, Kohat and Rohilcund; it does not grow to a large size. —*Dr. J. L. Stewart, p.* 208.

SALIX TETRASPERMA, *Roxb.*

Salix ichnostachya, *W. Ic.*

Panee juma. BENG.
Mo-ma-kha. BURM.
Baishi. HINDI.
Gud-bhyns of Kumaon.
Bhuntas. PANJAB.
Bis. ,,
Bida. PANJ.
Bed-i-leila. ,,
Safeda. ,,
Laila. ,,
Majnun. ,,

This grows on the banks of the hill streams of Kumaon, is planted on the plains of the Panjab and on the hills at 4,000 to 6,000 feet and has a girth up to 6 feet. Is common at Rangamally in the Terai, in the Kheree pass, and along the foot of the mountains: it grows in Bengal and the peninsula of India, likewise in British Burmah. Dr. Stewart says its timber is not applied to any special use, but Mr. R. Thompson says, although small, it is tough and elastic. The wood is not used in Burmah. A cubic foot weighs lbs. 37. In a full-grown tree on good soil the average length of the trunk to the first branch is 10 feet, and average girth measured at 6 feet from the ground is 3 feet.—*Roxb.* iii, 753, *Drs. Stewart, Brandis and Hooker, Him. Jour., Vol. I., p.* 400, *Dr. Royle's Ill., Bot. Him., p.* 343, *Voigt, Mr. Powell.*

SALORA, URIA. A tree of Ganjam and Goomsur, extreme height 22 feet, circumference 1 foot, and height from the ground to the intersection of the first branch, 5 feet. A common tree, only used for firewood. The leaves are eaten.—*Captain Macdonald.*

SALVADORA INDICA, *Royle; Roxb. W. Ic.*

Salvadora Wightiana, *Herb.; Hook.*
,, Persica, *Roxb.; Fl. Ind.* not *Linn.*

Mahomedan tooth brush tree. ENG.
Jal. HIND.
Irak. PERS.
Miswak. ,,
Pedda vara goki. TEL.

Grows towards the sea coast in the north

GSL

part of the island of Ceylon, and near the sea, and in both the Concans. It is found in the Panjab and on the banks of the Jumna, and from Delhi to Saharunpore. The leaves "Rasuna," resemble the lanceolate senna, and are also purgative ; the fruit, called *Peel* and *Pinjood*, is said to be eatable. It is not known whether the root bark possesses acrid properties. The twigs of this tree are used as tooth-brushes. Wood useless as timber.—*O'Shaughnessy, p.* 527, *Thirty-five years in the East, by Dr. Honigberger, p.* 339, *Thwaites, Dr. J. L. Stewart.*

SALVADORA OLEOIDES, *Dne.*

S. Persica, *L.*

Jal, Jhal. Panj.
Plewane. Pushtu.
Van. Panj.
Vani. ,,
Vanr. Panj.
Mithivan. ,,
Wanna. ,,

Fruit.

Pilu ; Pil : Tak.

This tree grows from Palestine to Multan, and is very common in the Multan Division of the Punjab. It attains a considerable height with a girth of 12 to 14 feet. The wood is close-grained, and is used in the Panjab for rafters and Persian wheels, and in Sind for knees of boats. It is largely used as fuel.—*Dr. J. L. Stewart, p.* 175, *Mr. Powell's Hand-book.*

SALVADORA PERSICA, *Linn.* ; *W. Ic.*

Rivinia paniculata, *Forsk.* | Cissus arborea, *Forsk.*

Khardal. Ar.
Mustard tree of Scripture.
Chardul of the Talmud.
Sinapis. Gr.
Kharjal. Hind.
Peeloo. Mahr.
Khardalo. Syriac.
Ughai. Tam.
Pinna qu ? chinna ? vara gogu. Tel.
Ghunia.

This tree grows in Arabia and the Persian Gulf, and is very common in Ajmir and Marwar. It is not a tree common on the Bombay side of India, except at mahomedan durgahs and places of worship ; but it grows wild on the coast in the Hubshee's country of Zanjirah, and in the southern Maratha country, but seldom reaches any size. In Sind it is more common, and grows considerably larger. It thrives well in every soil, and is in flower and fruit all the year round. Trunk generally crooked, from eight to ten feet high to the branches, and one foot in diameter. It is supposed to be the mustard tree of Scripture. Dr. Gibson is inclined to think that the wood of this tree is well worthy of an extended trial, as it seems rather strong and of compact grain. The bark of the root is very acrid, and if applied to the skin soon raises blisters ; it promises to be a stimulant of very great power.—*Drs. Irvine, O'Shaughnessy, Roxb., Gibson and Royle.*

SAMADERA INDICA, *Gærtn.*

Karin gota. Maleal. | Samadara-gass. Singh.

A large tree of Ceylon, of the south of India and the Concans. Wood small and bitter and wood, fruit and root are used medicinally ; its bark is the Niepa bark of commerce.—*Thw., Eng. Cyc., Useful Plants, Mr. Fergusson.*

SAM-MARM, Tam. Soymida febrifuga. A wood of Tinnevelly, of a red colour, used for furniture of any description.—*Col. Frith.*

SAMPAYA-PAULAY, Tam. A wood of Tinnevelly, of a light-brown colour, specific gravity 0·792, used for building purposes.—*Colonel Frith.*

SANDORICUM, *Species.*

Thittoo. Burm.

A Tavoy wood, used for furniture.—*Dr. Wallich.* (*Note*—Is this S. Indicum ?)

SANDORICUM INDICUM, *Cav.*

Trichilia nervosa, *Vahl.*

Theit-to. Burm.
Indian sandalwood. Eng.
False mangosteen. Eng.

This elegant timber tree grows to a large size in the south of Inda. In British Burmah, it is scarce in the forests, but is large and plentiful near all villages both in the Rangoon and Tounghoo districts, where it is cultivated by the Burmese for its fruit, which is of the size of an orange, and has a fleshy acid pulp. It grows also in Penang, the Moluccas and Philippines. The wood is white coloured and adapted to every purpose of house-building. The pulp of its fruit is eaten raw by the natives of Tenasserim who esteem it excellent. It makes a good jelly. Its root is bitter and used medicinally in bowel complaints.—*Eng. Cyc., Drs. Mason, McClelland and Voigt.*

SANDWICH ISLANDS produce timber of the Eugenia Malaccensis, E. Ohia-ha, Myoporum tenuifolium, Santalum Freycinetianum.—*Bennett.*

SANKUANG, a Penang wood, of a pale brown colour, used only for ornamental work. —*Col. Frith.*

SANTALUM ALBUM, *Linn.* ; *Roxb.*

Ayasru. Amboin.
Narti. Annatom Island.
Niat. ,,
Sandal abiad. Ar.
Chandana. Beng.
Sanda-ku. Burm.
Sri-ganda. Can.
Gandaga mara. ,,
Tan-heong. Chin.
Tan-muh. ,,
Kaya-yndhan. Coch.-Chin
Sandel. Dut.
Chunduna. ,,
Ghundasaru. ,,
Sandal wood. Eng.
White sandal wood. ,,
Yellow ,, ,, ,,
Sandale. Fr.
Jarso. Fiji.
Sundul sukur. Guz.
Sandal sakar. ,,
Chandana. Hind.
Kat chandan. ,,
Sandal. Hind.
Sakar ? ,,
Sandalo. It.
Chandan. Mahr.
Jindana. Malay.
Chandana. ,,
Chandana mara. Maleal.
Ban-alu. Marquesas.
Nassau. New Hebrides.
Turi-turi. Oparo-Islands
Sandal safed. Pers.
Hia-hi. Sandwich Islands
Chandana. Sans.
Mala-yaja. ,,
Sandan. Singh.
Rat kihiri. ,,
Nebissi. Tanna Islands.
Eimeo. Tahiti.
Ahi. ,,
Chandanam. Tam.
Shandanam. ,,
Chandanam. Tel.
Chandanapu chettu. ,,

GSL

Tella [illegible]danam. TEL. | Rakta krishna. TEL.

There are three kinds of Sandal woods known in commerce, the white, the yellow, and the red. The last is from the Pterocarpus santalinus, *Linn.*, and is also called saunders wood, and red saunders wood, but the white and the yellow are from the Santalum album, now under notice. It is a small or moderate-sized tree which grows in both the Indian peninsulas, in Assam, Cochin-China, China and, as the various names will show, in many of the islands of the Eastern Archipelago. It is much sought after for its wood which, in Southern India, where it grows in a wavy tract from S. Canara, southwards into Mysore and Coimbatore, is cut into billets of 50 to 70 lbs., and sold by weight in that state. It is burnt as a perfume, in houses and temples, both in India and China, and is used in the funeral ceremonies of the Hindus. The wood is chiefly remarkable for its agreeable fragrance and is employed for trunks, almirahs, &c., as a preservative against insects. It is much used in making work-boxes, walking sticks, pen-holders and other small articles of fine ornament. Ground into powder, it is a favourite cosmetic with Hindu, Chinese and Burmese ladies, and Hindu men use it to form the sectarian marks on their foreheads. It is much used among the Chinese in cabinet work, and in the manufacture of fans, and other ornamental articles. A valuable oil, used as a perfume, is distilled from the wood. The Sandal wood trees in Mysore, Canara, Coimbatore, Salem, and some in North Arcot, received much attention from Dr. Cleghorn, who remarks that its spontaneous growth has increased to a considerable extent, and he thinks it certain that with the vigilant supervision of local officers and slight assistance to nature in clearing the heads of young plants, which are often matted down by strong creepers, an addition might accrue to the revenue of these provinces. From information received from the late Assistant Surgeon Drew, he was enabled to communicate to the Commissioner of Mysore the existence of a large band of smugglers in an unfrequented path near the Carcoor pass, who were captured by the Mysore horse to the number of 78, with the Sandal wood tied on their backs. This seizure effectually stopped a long continued system of robbery on the Malabar frontier. In Ossoor and Denkinakotta are Sandal wood jungles. In the system now adopted in Mysore for the preservation of young plants and the means of ensuring a regular revenue, Colkars are employed to destroy the strong creepers which tend to choke the young plants springing from seed dropped in hedgerows by birds. It is their duty also to cut, annually, all the ripe trees, 20 years old and no other, and to take care that the billets are properly prepared and sorted, and brought into the Sandal godown. The Sandal tree grows to perfection in Mysore, Denkinacotta, Andyar, Collegal, and Suttimungalum, and yields a large annual revenue to the State. It also thrives well in some parts of Salem, Coimbatore and North Canara. Dr. Gibson (Report, p. 162) mentions that the Sandal wood appears to grow freely without any cultivation in all parts of the Bombay Deccan and may be seen in quantities in waste gardens, and even in some of their grass preserves, and trees may be seen in numbers of the hedges along the water-courses in western Khandesh. But, the northern Bombay Sandal wood has not the high qualities of that found in the more southern provinces. In the Dharwar collectorate there are about 153,000 trees, a number which much exceeds that found in the whole length and breadth of the more northern provinces. From the facility with which the tree is raised, and the great abundance of the seed which it furnishes, Dr. Gibson is of opinion that its extension should be kept in view. Sandal wood is very liable to the heart-shake which decreases its value twenty to thirty per cent. In North Canara, there are many stills for making sandal wood oil. There is a current belief that the fragrance of the wood, depends on the local circumstances of its growth, and that it is much modified by peculiarities of soil and elevation. A Chinese mentioned that the sandal wood growing on rocky mountains contains the greatest quantity of oil. That of North Canara is not of the first quality, and Dr. Gibson, when at Hungul, tried the fresh Sandal wood by cutting into several of the ripe trees, and, he remarks, (Report, p. 58), "I can safely say that I did find the wood very deficient in fragrance as compared to that of Mysore." Dr. Cleghorn tells us that there is a depôt for this wood in the forests near Denkinacotta, which the poojalies, for a few months of the year, work very laboriously and cheaply, felling, cleaning, shaving and cutting the trees into billets of $2\frac{1}{2}$ to $3\frac{1}{2}$ maunds of 25 lbs. each for one Rupee and bringing the same to the nearest store. Dr. Bennett mentions that the Sandal wood tree grows slowly and irregularly, in the Archipelago, where it generally attains a height of 8 feet without branches and 30 feet with branches and 2 feet in diameter. It is the heart of the tree, he adds, which yields the oil, and one pound of the wood will yield about 2 drams. The wood increases in fragrance in age. The Sandal wood of the Sandwich group is from two other species of the same genus, S. freycinetianum and S. paniculatum. And, the name of Sandal wood is also given to the wood of the Exocarpos latifolia,

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which grows in the Percy Islands, Repulse Bay, Cape-Upstart, Palm Islands, &c. &c., but it is useless as a substitute. In 1847 nearly 1,000 tons of the true Sandal wood, procured chiefly from New Caledonia, the New Hebrides, &c., were exported, from Sydney to China, where it is burnt with other incense in the temples. The Sandal wood trade in these islands gives employment to about six small vessels belonging to Sydney. In China, it realizes about £30 per ton.—*Drs. Gibson, Conservator's Reports*, 1849 *to* 1856, *p.* 162, *and* 1857 *to* 1860, *p.* 58, *Cleghorn's Conservator's Reports, p.* 41, *McGillivray's Voyage, Vol. I, p.* 97-8, *Wight, Bennett's Wanderings in N. S. Wales.*

SANTALUM FREYCINETIANUM, the sandalwood tree of the Sandwich Islands has almost disappeared.—*Bennett's Gatherings, p.* 419.

SANSIO, JAP., a middle-sized tree of Japan, with prickles. They make use of its bark and husks instead of pepper or ginger, and they eat the pleasant tasting aromatic leaves. This tree is described and figured in Amœn. Ex., p. 892.—*Thunberg's History of Japan, Vol. I, p.* 115.

SAPINDUS, a genus of plants of the natural order Sapindaceæ, names derived from Sapo Indicus or Indian soap, the berries of several of the species being employed as a substitute for soap. Several species furnish useful timbers and edible fruits. Sapindus laurifolia, *Roxb.*, is a stout, very shady tree, of various parts of India: S. squamosus, *R.*, is a native of the Malay Archipelago and of the island of Nassau-laut. S. longifolia and S. fruticosus, *R.*, and S. serratus, *R.*, are trees of the Moluccas.—*Willde.*

SAPINDUS, *Species.*

Koote legree. CAN. | Khete. MAHR.

This is common in Canara and Sunda, in the ravines below, but is not common on the high lands of Canara: wood is not used in the arts, but, for building purposes, is of average quality.—*Dr. Gibson.*

SAPINDUS, *Species.*

Tsheik khyee. BURM.

This species is found on the hills, and in the forest skirting them in British Burmah where the wood is prized for house posts, ploughs, &c. Its color is grey, with a beautifully mottled grain. A cubic foot weighs 66 lbs. In a full-grown tree on good soil the average length of the trunk to the first branch is 40 feet, and average girth measured at 6 feet from the ground is 6 feet.—*Dr. Brandis, Cal. Cat. Ex.* 1862.

SAPINDUS ACUMINATUS, *Wallich, Royle.*

Dodhan HIND.
Ritha. „
Soap nut. ENG.

A tree of the valleys of the Himalaya, of Nepal and the Khassya mountains: the wood is heavy and useful, but not available, as the berries are much valued and sold in every bazar as a substitute for soap. It is planted as an avenue tree in Kangra valley, and in Chamba, where it is common.—*Mr. Powell's Hand-book, Voigt.*

SAPINDUS DETERGENS, *Roxb., Royle.*

Ritha. BENG., DUK., HIND.
Dodhan. PANJ.
Urista. SANS.

This tree grows in both peninsulas, to a height of about 20 feet. The fruit is used for washing. In the Panjab, a handsome tree, but small, the largest girth seen being 8½ feet; it is planted up to 3,500 in the Panjab valleys as far as the Ravi. The timber is white, soft and weak and of no repute.—*Dr. J. L. Stewart, p.* 32, *Voigt. p.* 94, *Roxb., Vol. II, p.* 280.

SAPINDUS EMARGINATUS, *Vahl.; Roxb.; W. & A.; Ill. Graham.*

The Tree.

Buro ritha. BENG.
Thaly marathu. CAN.
Soap nut tree. ENG.
Riti-ka-jhar. HIND.
Areeta. MAHR.
Rarak. MALAY.
Penela. SINGH.
Puvandi. TAM.
Pounanga. „
Pucha cotta maram. TAM.
Kunkudu. TEL.

The Wood.

Soap-nut wood. ENG.
Kunkudu wood. ANGLO-TEL.
Kankadu chettu. TEL.
Kunkudu karra. „

The Nut.

Ritah. DUK.
Rishta. „
Soap-nut. ENG.
Rithi-ki-binj. HIND.
Bindake. „
Rarak. MALAY.
Arishta. SANS.
Phenila. „
Ponnang cottai. TAM.

The Oil.

Soap-nut oil. ENG.
Rithay-ka-tel. HIND.
Puvandie cottay yennai. TAM.
Pungum yennai. TAM.
Kuncudu nuna. TEL.

This handsome tree grows in the peninsula of India, and in Bengal. In the Madras presidency, it is met with in the villages, and the fruit is sold in all bazars as a detergent, and in many cases yields a more profitable return than any other fruit tree. In the Bombay presidency, it is found planted near mahomedan buildings and is not known to occur in the forests. The wood is white, and Dr. Gibson had seen it used only for fuel. Captain Beddome describes it as a yellowish, prettily grained, tolerably hard wood.—*Drs. Roxb., Wight, Gibson and Cleghorn, Captain Beddome.* (*Note.*—It seems to be this tree which Mr. Edye notices under the name of Horingi maram, as the Tamil, "for a tree which produces the soap-nut, or rather the soap-apple, which the natives use as a substitute for soap." This tree he adds is common on the Malabar coast, and grows to about eighteen inches in diameter, and twenty feet long. It is used by the carpenters for many purposes. There is another sort named Horingi tanga maram, which is the jungle or wild soap-tree. The apple is very inferior in size and quality to the former, and the tree nothing more than a jungle or under-wood. These soap-apples are gathered and sold in the bazaar at all seasons of the year, and answer the purposes of soap for washing.—(*Edye, Forests of Malabar and Canara.*)

SAPINDUS RUBIGINOSUS, *Roxb., II, p.* 282, *W. & A., Willde.*

Sapindus fraxinifolius, *D.C.*
Moulvisia rubiginosa, *G. Don.*

Hseik-kyi. BURM.
Rusty soap-nut. ENG.
Rithi-ka-jhar. HIND.
Mani pungum. TAM.

Isakárási manu. TEL.
Ishi-rashi. „
Undurugu manu. „

This tree grows in both the peninsulas of India, it is found, though not very plentiful, in the Pegu district, where it attains a girth of three or four feet, growing tall in proportion and straight. There, its wood is white-coloured and adapted for every purpose of house-building. Dr. Roxburgh says that the wood of this tree is large, straight, strong and durable, and useful for a great variety of purposes. When dry it has something the appearance of teak, but, towards the centre he says, it is chocolate-coloured. Its Tamil name is derived from the quantities of silex or sand it contains, particularly near the bark, which injures any tools used in working it.—*Voigt, Hort. Cal. Cat., Mr. Rhode's MSS., Dr. McClelland, Fl. And., Roxb., Vol. II, p.* 283.

SAPINDUS UNIJUGUS, *Thw.* A large tree, in the Hewahette district of Ceylon, at an elevation of 3,000 to 4,000 feet. Wood not known.—*Thw. En. Pl. Zeyl., p.* 56.

SAPOTA, *Species.*

Lawoloo. SINGH.

A tree of the western province of Ceylon, the berries of which are eaten by the natives. The wood is little durable, lasting only 10 years, but it is used for common house-building purposes. A cubic foot weighs 39 lbs.—*Mr. Mendis.*

SAPOTA, *Species?*

Palsepoan. BURM.

In Tavoy, a very large tree, used in building.—*Dr. Wallich.*

SAPOTA ELENGOIDES, *A. DC.*; *Prod. W. Ic.* A tree of the hot, drier parts of the island of Ceylon, and of the Neilgherry, Palnely and Anamullay Hills. Its wood is strong and elastic.—*Thw. En. Pl. Zeyl., p.* 175, *Major Beddome.*

SARAKONTAY, TAM. A wood of Tinnevelly, of a whity brown colour, used in building in general.—*Col. Frith.*

SARCOCOCCA PRUNIFORMIS, *Lind.*, 290. Grows in the Neilgherries and in the Central Province of Ceylon, at an elevation of 4,000 to 5,000 feet, of small diameter, but its wood is so like that of box, that it is called the "Neilgherry Box-wood."—*Drs. MacIvor and Cleghorn, Thwaites* quoted by *Mr. Fergusson.*

SASSAFRAS WOOD.

Sassafras. ARAB. ENG. FR. GER. LAT. SP.

Caya vang-dee.? COCH.-CHIN.
Sassafraso. IT.

The true Sassafras wood is from the S. officinale, the Sassafras laurel of North America. But, at the Madras Exhibition of 1855, the Jury remarked two specimens of wood, like Sassafras, both from Mergui, very fragrant, and containing an essential oil of value in medicine. Dr. Mason, indeed, says that a species of Sassafras abounds in the Tenasserim jungles, which seems to possess all the properties of the Sassafras of America. But he had never met with the tree in fruit or flower, and the leaf, he adds, shows that it is not the *Sassafras officinarum*; in another place, he mentions that a species of laurus, with the odour of Sassafras, is, in Tenasserim, often used in house carpentry. It is probably the Camphora glandulifera, and Dr O'Shaughnessy tells us that the Sassafras of Assam, is perhaps the bark of the Camphora glandulifera, *q. v.* It is fully equal to the American kind, and may be introduced accordingly, although its source is as yet not perfectly ascertained. Sassafras parthenoxylon, is a lofty timber tree growing in the forests of Sumatra. The bark is rough and brown. The fruit has a strong balsamic smell, and yields an oil, considered useful in rheumatic affections. An infusion of the root is used in medicine.—*Eng. Cyc., Beng. Phar., p.* 279, *Dr. Mason, Tenasserim, M. E. J. Rep.* 1855.

SARRA OR SARRAH, TEL. A wood of the Nalla mallai, of a dark grey colour and appears to be readily attacked by the worm.—*Mr. Latham.*

SATIN WOOD has been sufficiently noticed under its botanical name, Chloroxylon Swietenia, and it will suffice here to mention that very fine Satin wood occurs at Kutapatti, in the Tongrikottah talook of Salem. It is used for the naves of gun-carriage wheels and is the best suited of all the Indian woods for fuses. The price is nearly the same as that of teak and black-wood. Colonel Frith mentions a Satin wood of Penang, of a straw colour and a beautiful wood for ornamental furniture, &c.: but, when in that island in

186[illegible] could not learn that the Satin wood tree grows there.—*Dr. Cleghorn's Conservator's Report*, 1859-60, *p.* 15, *Col. Frith. See* CHLOROXYLON SWIETENIA.

SAUVADY MARAM, TAM. A timber tree of Coimbatore.—*Dr. Wight.*

SCHLEICHERA TRIJUGA, *Willd.; Roxb.; W. & A.; Gr.*

Melicocca trijuga, *Juss.; DC.*
Stadmannia ,, *Spreng.*
Cussambium pubescens, *Bach.*
Schleichera ,, *Roth.*
Melicocca ? ,, *DC.*

Koon.	BENG.
Gyo.	BURM.
Saguri mara.	CAN.
Ceylon Oak.	ENG.
Honey tree.	,,
Kusoomb.	MAHR.
Koosoombh.	,,
Cong-gass.	SINGH.
Puvu maram.	TAM.
Pu maram.	TAM.
Mayi.	TEL.
Posuku.	,,
Rotangha.	,,
Kola-koosoomoo.	URIA.
Ghuntiah ,,	,,

This valuable timber tree, very briefly noticed under Melicocca trijuga, grows on the eastern verge of the Panjab and in all the valleys and outer ranges of Kumaon, where it is used for the pestles of sugar and oil-mills. It grows in the warmer parts of Ceylon, up to an elevation of 2,000 feet. It grows in Coimbatore and is common in Canara and Sunda, though most so below the ghats where it reaches the size of a large tree. It is not uncommon in the Dundelee forest and in the forests of the South Konkun, and common in those of the North Konkun. Major Pearson says it is abundant in the Central Provinces, where its timber is used for oil-presses and sugar-mills, and it is on this tree that the lac is for the most part deposited. It is said to be very abundant in the Godavery forests and to occur in Ganjam and Goomsur, but, there are two Koosoomo trees in the last district, the Kola koosoomo and Ghuntiah koosoomo, the former of which abounds, and is larger and more useful than the latter which is not so common, (but, that either of these are the S. trijuga, requires confirmation). It attains an extreme height of 50 feet with a circumference of 4½ feet. The height from the ground to the intersection of the first branch is 9 feet. It produces a red, strong, hard and heavy wood, which, in Coimbatore, is generally rather small and used to make pestles, spokes for bandy wheels and other purposes where much strength in small space is required: but, in the Bombay forests it reaches a size so large that it is used for making screw rollers for sugar-mills, cotton-presses, &c. In Ganjam and Goomsur the wood named koosoomo is used for oil-presses, sugar crushers and the axle-trees of carts and ploughs. It is always preferred for sugar and rice-mills. The seeds yield an oil which is used for burning, and in Ceylon and Ganjam a considerable quantity of lac is obtained, gathered from the young branches, and which in Ganjam, is in request among native jewellers. It is one of the heaviest woods known in Burmah, where it is common in the plains as well as on the hills, and is there used for cart wheels, the teeth of harrows, the pestles of oil-mills, &c. &c. A cubic foot there weighs lbs. 70. The trunk of a full-grown tree on good soil attains an average length to the first branch of 25 feet, and its average girth measured at 6 feet from the ground is 12 feet.—*Drs. Stewart, Wight, Gibson and Brandis, Captain Macdonald, Lieut. Col. Lake, Voigt, Hort. Cal. Cat. Thwaites, p.* 58, *Major Pearson, Mr. R. Thompson. See* KOOSOOMB, KOOSOOMBHA, *also* Purlah Kimedy wood, KUSSOOMB, MELICOCCA TRIJUGA.

SCHMIDELIA SERRATA, *DC.; W. & A.*

Ornitrophe serrata, *Roxb. Cor. Pl. F. I.* ii, 266.

Rakhal phul ka jhar.	HIND.
Korra chettu.	TEL.
Taulika.	TEL.
Tantisa.	,,
Tavatiké.	,,

The Schmidelia genus of plants, one of the Sapindaceæ, consists of shrubs or small trees; the only one requiring mention is the S. serrata. It is a straggling shrub, or small tree, with ternate leaves. It grows in the peninsula of India and Bengal. Timber very small, its fruit is eaten by the natives. Its root is used in diarrhœa by the Teling physicians.—*Voigt, M. E. J. R.*

SCHREBERA SWIETENIOIDES, *Roxb., p.* 109.

Weavers' beam tree.	ENG.
Mava-linga maram.	TAM.
Moga ,,	,,
Mukodi.	TEL.
Makadoo chettu.	TEL.
Makkam.	TEL. of the Nalla Mallai?

A large timber tree, a native of the valleys of the mountainous parts of the Rajahmundry circars, the Balaghat mountains, the Thull ghat near Bhewndy, Jowar and the Hala mountains west of the Indus, and common in the Central Provinces. Its wood is of a grey colour, very close-grain, heavy and durable. It is much employed by weavers for beams and for many other purposes of their looms. It is said not to be liable to warp or bend: and was recommended by Roxburgh as a substitute for box in the scales of mathematical instruments.—*Roxb., Fl. Ind., Vol. I, p.* 109, *Captain Beddome, Mr. Latham, Major Pearson.*

SCLEROSTYLIS ATALANTOIDES, *Blume.*

Limonia bilocularis, *Roxb.*	
Arawi-nim.	TEL.

This small tree or shrub is found in the Circars. Its wood is yellow, and is always very small, but is very hard and might be used as a substitute for box.—*Voigt, Captain Beddome.*

SCLEROSTYLIS CEYLANICA, *Wight, Ill.*

Sclerostylis Arnottiana, *Wight, Ic.*
Rissoa Ceylanica, *Arn. Pug.*, *p.* 6, (324,) *c. p.* 1196.

Yucca-naara-gass. SINGH.

A tree of the warmer parts of Ceylon, not uncommon: wood not known.—*Thw. En. Pl. Zeyl.*, *p*. 46.

SCLEROSTYLIS ROTUNDIFOLIA, *Thw.* A small and not common tree, growing in Ceylon, at an elevation of 4,000 feet and upwards.—*Thw. En. Pl. Zeyl.*, *p.* 46.

SCŒVOLA PLUMIERI, *Vahl.*, 169.

Maha-takkada. SINGH.

A sea-side plant, from the large white pith of which, ornaments are made.—*Mr. Fergusson.*

SCYPHOSTACHYS COFFEOIDES, *Thw.*

Wal-kopee. SINGH.

Produces a close-grained white wood, used at Galle for inlaying.—*Thw.*, 157, *quoted by Mr. Fergusson.*

SEAFORTHIA SAPIDA. The Norfolk Island cabbage tree, is a handsome palm of Norfolk Island. The young unfolded leaves are used for making hats.—*Keppell, Vol. II, p.* 283.

SEET-SEEN, BURM. An Amherst wood, used for the construction of religious houses. It is a red, compact, very ponderous, and highly valuable wood.—*Cat. Ex.* 1851.

SEECURANEE, TEL. A Nalla Mallai wood, white coloured, light and straight-grained, and would be useful for temporary purposes.—*Mr. Latham.* (*Note.*—Is this the Is-akaras-i, *Tel.*, the Sapindus rubiginosus?)

SEGUR. This Neilgherry forest had been much exhausted by the year 1859, and there was very little teak or blackwood fit for felling. It had been the main source of supply to Ootacamund for house-building purposes.—*Madras Conservator's Report, p.* 2.

SEMECARPUS. A genus of plants, growing in the south-east of Asia, of the sub-order Anacardieæ. They are moderate-sized or large trees, and many of them furnish woods and other useful products. Semecarpus acuminata, *Wall.; Thw.*, is a middle-sized tree in the forests of the Ratnapoora, Galle and Ambagamowa districts of Ceylon at no great elevation, and it grows also in Chittagong. S. cassuvium, *Roxb.*, the Cassuvium silvestre of Rumphius, is a tree of the Moluccas, where its tender leaves are eaten and the acrid juice of its stem is employed to varnish shields, canes, &c. Semecarpus coriacea, *Thw.*, is a moderate-sized tree of the Central Province of Ceylon, at an elevation of 5,000 to 7,000 feet. Semecarpus Gardneri, *Thw.* Badoolla-gass, SINGH., is a moderate-sized tree, very common in the Central Province of Ceylon, up to an elevation of 3,000 feet. S. humilis, *Wall.*, occurs at Prome. Semecarpus Moonii, *Thw.*, is a moderate-sized tree in the south of the island of Ceylon, at no great elevation. S. nigro-viridis, *Thw.*, is a moderate-sized tree in the Central Province of Ceylon, at an elevation of 2,000 to 4,000 feet. S. odoratus, *Wall.*, in the Royal Garden, Ceylon. S. oblongifolia, *Thw.*, Badoolla-gass, SINGH., is a moderate-sized tree, common in the hot, drier parts of the island of Ceylon, up to an elevation of 3,000 feet. S. obovata, *Moon.*, is a moderate-sized tree of Ceylon, growing at Caltura and near Ratnapoora. S. obscura, *Thw.*, a moderate-sized tree growing at Deltotte, in the Central Province of Ceylon, at an elevation of 3,000 feet. S. parvifolia, *Thw.* Heen-badoolla-gass, SINGH., is a small-sized tree of Ceylon, in the Hinidoon Corle, in the Galle district. S. pubescens, *Thw.*, is a small-sized tree of the Ratnapoora district in Ceylon, at no great elevation. S. subpeltata, *Thw.* Maha-badoolla-gass, SINGH., is a large tree of Ceylon, 30 to 40 feet high, in the Singhe-rajah and other forests between Ratnapoora and Galle. As to the woods of most of these, information is required.—*Thw., En. Pl. Zeyl., p.* 75, *Voigt, Hort. Cal., p.* 271, *Roxb., Fl. Ind., Vol. II, p.* 85.

SEMECARPUS ANACARDIUM, *Linn.; Roxb.; W. & A.; W. Ic.*

Anacardium latifolium, *Lam.*
" officinarum, *Gært.*

Beladur. AR.
Bhela. BENG.
Bhela taki. "
Bhola taki. "
Chai-bin. BURM.
Ghera mara. CAN.
Gheru. CAN.
Bhalawan. DUK. HIND.
Bhela. " "
Marking nut tree. ENG.
Bellawa. GUZ.
Beebwa. MAHR.
Biboon. "
Kampira. MALEAL.
Arushkara. SANS.
Bhalataka. "
Shayng cottay maram. TAM.
Shayrang cottay. TAM.
Bhallatiki. TEL.?
Bhallatamu. "
Nalla jidi chettu. TEL.
Jidi chettu. "
Tummeda mamidi. "
Nellajidi. "
Jidighinzalu. "
Bhalleah. URIA.

This is a common tree in the Madras presidency, and on the skirts of the Bombay forests; but it also grows in Berar, Silhet, Assam, to the Panjab, Dehra Dhoon, Kyarda and Kumaon. It is common in the Pegu and Tounghoo forests, where it grows to be a middle-sized tree, and is ornamental. The juice is acrid, and woodcutters prefer to cut the tree after it has been killed, by ringing the bark. Dr. McClelland says that the wood is adapted for fancy work and cabinet making, but to Dr. Wight it was reported to be of no value. The softness of the wood and its acrid juice, which renders it dangerous to work, detract from its value, and it does not stand exposure. The

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nuts are exported from the Dekhan and Mysore as a mordaunt.—*Drs. Wight, McClelland, Gibson, Cleghorn, Voigt, and Roxb., Vol. II., p.* 85, *Mr. R. Thompson.*

SEMECARPUS CUNEIFOLIUS, *Roxb.*

Biboow-a.	MAHR.	Bibwa.	MAHR.

This tree grows in the Bombay ghats, Lanowlee Grove, Khandalla, and about Parr; also in Hindustan, Nepaul and the Himalaya. Dr. Gibson says, the wood is not of any value, but might be turned to some account by being creosoted, of which the openness of its fibres would admit.—*Dr. Gibson, Voigt, Roxb., Vol. II, p.* 86.

SESBANIA ÆGYPTIACA, *Pers.*

Æschynomene sesban, *Linn; Roxb.*
,, Indica, *Burm.*
Coronilla sesban, *Willd.; Roxb. E. I. M.*
var. α. Sesbania bicolor. var. β. Sesbania concolor.

Jaianti.	BENG.	Kedangu.	MALEAL.
Bouro-janti.	,,	Karun chembai.	TAM.
Juyuntee.	HIND.	Sominta.	TEL.
Jet also Jaith.	,,		

This is a shrub or very small tree which grows in Ceylon, in both the Indian peninsulas, in Bengal, Assam and Saharunpore. Voigt, quoting Dr. Gibson, says it is cultivated in the plains of the Dekhan, and extensively used as a substitute for bamboo. Its wood is said to make the best charcoal for gun-powder.—*Voigt, Roxb., Fl. Ind., Vol. III, p.* 332.

SESBANIA PALUDOSA, *Roxb.*, iii, 333.

Æschynomene paludosa, *Roxb.* ? ?

Kath-sola.	BENG.	Muntajiluga mokka.	TEL.

An annual, but has the appearance of an elegant tree, it is a native of wet marshy places, in the south of India.—*Roxb., Flor. Ind., Vol. III, p.* 333.

SETHIA ACUMINATA, *Arn.*

Batta-korilla-gass. SINGH.

A Ceylon tree, in the Ambagamowa and Saffragam districts, at an elevation of 1,000 to 2,000 feet, wood not known.—*Thw., En. Pl. Zeyl., p.* 53.

SETHIA INDICA, *D C.; W. & A.; W. Ill.*

Erythroxylon monogynum, *Roxb.*
,, areolatum, *Ains. and Wight.*
,, sideroxyloides, *Roxb.*

Doodaru.	DUK.	Sima natti.	TAM.
Fen-tree.	ENG.	Devadaram.	,,
Sembu linja maram ?	TAM.	Adavi goronta.	TEL.
Sembu-linga maram ?	,,		

A small tree of the drier parts of Ceylon, with timber resembling sandal wood. Dr. Gibson had not seen it in the Bombay forests. Dr. Wight believes this is the *Erythroxylon areolatum* of Ainslie; when largest, it is still but a small tree. Ainslie states that the wood is so fragrant, it is used in Mysore as a substitute for sandal wood. Mr. Ondaatze informed Mr. Thwaites that an empyreumatic oil or wood-tar, used for preserving timber employed in the construction of native boats, is obtained from the wood of this tree.—*Thw., En. Pl. Zeyl., p.* 53; *Drs. Wight, Gibson, Voigt, and Ains., p.* 213. *See* ERYTHRXYLON.

SHALIMBO-BANSO, TEL. Extreme height 40 feet, circumference 2½ feet. Two species of bamboo which abound in the Ganjam and Goomsur forests.—*Captain Macdonald.*

SHIM, is the Tamil and Malayala name of a tree, commonly known as the Buttress tree. It grows to an enormous size. Edye saw one forty-five feet in circumference, and one hundred and ten feet long. It has a soft, spongy sort of wood of a white colour; not durable, nor of much use, unless it be oiled, when it may last for five or six years for canoes or catamarans, provided they are taken out of the water when not wanted. If it be kept in water two years, it will render the wood water-logged and useless.—*Eyde, Forests of Malabar and Canara.* (*Note.*—Major Beddome considers this to be Acrocarpus fraxinifolius.)

SHOREA, *Species.*

Nyaung-lan. BURM.

This grows in Amherst. It is of a peculiar kind, employed for beams, rafters and boat-building. The root is used as umbrella stocks. —*Cat. Ex.* 1851.

SHOREA ? *Species ?* a tree is noticed by Dr. Mason, as the largest in the Tenasserim provinces, but, he was doubtful as to its being a Shorea, and says it is principally used for making large boats. Its places of growth are usually of difficult access by water, and it is not in very general use. He quotes Mr. O'Riley as saying, "it is well adapted for spars for vessels."—*Dr. Mason.*

SHOREA, *Species.* Under the term "lard or hogs-lard shorea," Dr. Mason describes a species as growing on the mountains in the interior of Tenasserim, which produces an oil of the consistence of lard. Wood not known, but being of the same genus as the Sal tree, he deems it worth inquiring regarding.—*Dr. Mason.*

SHOREA CAMPHORIFERA, *Roxb., Flor. Ind., Vol. II, p.* 616.

Dryobalanops camphora, *Royle.*

This remarkable tree affords both the camphor and camphor-oil of Borneo and Sumatra. Mr. Prince, of Tappanooly, on the western coast of the latter island, writes that the tree grows spontaneously in the forests, and is to be found in abundance from the back of Ayers Bongry as far as north of Bacongan, a distance of twenty-five miles. It is one of the largest trees that grows on that coast,

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several being six or seven feet in diameter, though others are only two and a half.—*Roxb., Flor. Ind., Vol. II, p.* 616, *Royle, Ill. Him. Bot., p.* 106.

SHOREA LACCIFERA, *Heyne.*

Vatica laccifera, *W. & A.*
Shorea robusta, *Roth. not Roxb.*
„ talura, *Roxb. ; Flor. Ind.*

Jalin? CAN.
Jalari? „
Talara. TAM.

A large timber tree of Mysore and of the Balaghat mountains, where it blossoms during the dry winds and ripens its seed in June. It yields a strong useful wood for a variety of purposes.—*Roxb., Flor. Ind., Vol. II, p.* 616, *Captain Puckle in Mad. Cat. Ex. of* 1862, *Useful Plants.*

SHOREA OBLONGIFOLIA, *Thw.* A large tree of Ceylon, growing at Saffragam and other districts in the south of the island, at no great elevation.—*Thw., En. Pl. Zeyl., p.* 36.

SHOREA OBTUSA, *Wall.*

Theya. BURM.

This wood grows in the Eng forests and on the brow of hills in Pegu, valued equally with Eng-yin or Sal. A cubic foot weighs lbs. 75. In a full-grown tree on good soil the average length of the trunk to the first branch is 50 feet, and average girth measured at 6 feet from the ground is 7 feet. It sells at 12 annas per cubic foot.—*Dr. Brandis; Cal. Cat. Ex.* 1862.

SHOREA ROBUSTA, *Roxb.*

Vatica robusta, *W. & A.*

Saj. AR.
Eing-gyin. BURM.
Saul tree. ENG.
Sal. HIND. MAHR.
Kundar of Kumaon.
Sala. SANS. TEL,
Uswucunida. SANS.
Gugalu. TEL.
Guggalam chettu. TEL.
Salwa. URIA.
Soringhi. „

Its resin.

Ral. HIND.
Rala. „
Dhoona. HIND.
Gugala. TEL.

This valuable timber tree is alluded to in ancient Hindu writings. In the Hindu Theatre (Vol. II., p. 1000), Madhava speaking of the coming rainy season, says :—

> " * * * * The days approach
> " When the long line of clouds shall shed on earth
> " Their amaranthine drops—trembling in the breeze
> " That from the east comes powerful, and embued
> " With the rich odours of the Sal and Arjuna."

It grows, it is said, in the Palghat (qu. ? Balaghat) mountains and to a limited extent on the west coast. In Goomsur, west of Burhampore and Russelcondah, the Sal forests are the most valuable tract of wood on the eastern coast of peninsular India. In the taluk of Goomsur and in the zemindari of Bodogoda, the Sal forests are important and accessible ; for, these districts are traversed by rivers and during the short freshes timber can be rafted to the coast. But the Sal forest of Goomsur, though valuable, is still scarcely equal in value to a second class forest of the western coast. In Goomsur, the tree grows remarkably straight and tall in the forests. In open places, however, it yields a thick trunk, throws out branches, and becomes umbrageous. Its seed has the utmost susceptibility of germination, with a vitality so limited in duration that it will not survive many days unplanted. It ripens at the commencement of the rains and after the first shower falls actually sprouting from the tree. In consequence, young plants come up in the utmost profusion forming patches of forest, which are literally impenetrable, till thinned by the woodsman. Captain Beddome found it abundant on the Indrawatti. In Nagpore, Sal is procurable from 25 to 60 feet in length, with a girth of 4½ to 3 feet. Captain Sankey says that the Sal of Nagpore, resembling Bejasar somewhat in colour, differs peculiarly from it in the construction of its grain, and in its freeness from the faults to which the other is so subject. In strength, size, and all the qualities of good timber, it appeared to him to stand first, of all those procurable in the Nagpore territories, as a tie beam or rafter wood ; but, unfortunately, the price, a rupee the cubic foot, from the cost of transport, renders it little available. The Nagpore Sal, he adds, does not appear to lose its essential oil for a long time, and always exhibits small surface cracks, which widen or contract with the change of season. The increasing means of communication in Nagpore may, perhaps, diminish the cost of carriage. Further to the north, a thick forest of Sal grows or grew on Parasnath. The Sal forests of northern India, according to Dr. Falconer, extend in a nearly unbroken belt along the Terai from the Ganges at Hardwar to the Burhamputar : and it occurs, also, in the Morung hills, and in Assam ; but in many parts, at the foot of the Himalayas, the forests are said to have become much exhausted. When Dr. Royle wrote, about the year 1834, Shorea robusta extended all along the foot of the Himalaya, to the neighbourhood of the Jumna, forming vast forests, frequently unmixed with any other tree, but generally confined in the most northern parts within the first range of the hills. The trees of this family of plants he adds, are conspicuous for their size and beauty, and for the excellent timber which most of them afford : and Shorea robusta furnishes the best and most extensively used timber in the north of India. West of the Jumna, there is only one considerable tract. It is close to that river at 1,500 to 2,000 feet, but the tree does not there attain a large size. The timber is hard, heavy and durable, and is very valuable where great strength is required and weight is no objection. In Pegu, the tree is found chiefly on the Shan side of the Tounghoo district, and in the forests north of Tounghoo, and in the south it is abundant inland in the Amherst and Tavoy provinces. Sal timber suffers much from exposure,—splitting and warping greatly. The wood is hard, of a light-brown colour and is in great repute : it is most valuable for house and ship-building, as vats for liquids, door frames, and for the rails and battens of doors : it is not suited for planks, it twists, shrinks and warps whenever the surface is removed, even after many years' seasoning. This wood is in general use for building purposes in the Ganjam and Vizagapatam districts. The Jury's Reports for the Exhibition of 1851, observed from Colonel Baker's excellent experiments, that it appears, compared with teak, its strength is about 1,121 to 869. From Major H. Campbell's valuable experiments, unseasoned Sal broke with a weight of 1,308 lbs., seasoned Sal with 1,319 lbs., and teakwood with 1,091 lbs., and added that it is unquestionably the most useful known Indian timber for engineering purposes. It is useful for wedges, is possessed of considerable elasticity and it resists the action of white ants. This wood should have a second seasoning after it is manufactured into half-wroughts, as there is a material shrinking immediately after the piece has been cut out of the wood and shaped. In the Madras gun-carriage manufactory, it is used for beams of gun and howitzer carriages ; light field axle cases of all kinds ; all parts of carts ; transport carriage cheeks ; handspikes of all sorts ; perches of waggons ; poles, short ; perches ; braces, framing and splinter bars of limbers, gun and waggon ; and framing of all carts. The character of this wood, as it occurs in the Tenasserim provinces, is described by Captain Dance as thoroughly good and valuable and, as one of the most durable in those forests, tough, elastic, large and extremely heavy. It is used for bows and for all kinds of purposes, by the Burmese, &c ; and he recommends it for rammer heads ; for handles of hammers, chisels, and other tools, also for sheave blocks, cogs and machinery in which great strength is required. Also for government buildings, wharves, &c., especially for railway sleepers, from its abundance and large girth. He says it is too heavy for helves. It is said to harden by exposure to water and even to strike fire with steel, after having been kept in water for a length of time. The Tenasserim sal, he adds, appears a closer-grained, better, and probably a heavier wood than the sal of India. He says its maximum girth, in Amherst, Tavoy and Mergui, is certainly 3 and said to be 5 cubits : maximum length, certainly 20, said to be 30 feet, and when seasoned it sinks in water. Major Benson writing of it, in Moulmein, says, it is a wood of dense structure, elastic and well adapted for the manufacture of gun-carriages, being stronger and less brittle than padouk. Dr. Royle quotes Mr. Colebrooke's remarks, regarding Shorea robusta and S. tumbuggaia, that they and perhaps other species of the genus, yield in great abundance the resin, called by the Hindoostanees dhoona, and by the Europeans in India, dammer, which is very generally used as a substitute for pitch for marine purposes. The natives of India also employ it in their temples, as an incense.—*Roxb., Fl. Ind.* ii, 615, *Voigt*, 124, *Dr. Mason's Tenasserim, Dr. Cleghorn in Conservator's Reports, Ains. Mat. Med., p.* 210, *Dr. Hooker's Him. Jour., p.* 21, *Captain Beddome, Colonel Maitland in Mad. Cat. Ex.* 1862, *Dr. McClelland, No. IX Indian Records, Royle Ill. Him. Bot., Major Benson, Captains Sankey and Dance : Jur. Rep. Ex.* 1851, *Wilson's Hindoo Theatre, Dr. J. L. Stewart.*

SHOREA STIPULARIS, *Thw.* A large tree of Ceylon, between Ratnapoora and Galle, at no great elevation, character of wood not known.—*Thw. Enum. Pl. Zeyl., I, p.* 36.

SHOREA TUMBUGGAIA, *Roxb.*

Vatica tumbuggaia, *W. & A.*

Thumbugum. TAM. | Tumbugai. TAM.

A large timber tree, a native of the Palghat mountains, which blossoms in the beginning of the hot season and ripens its seed in June. In the Balpalli jungles, in the Cuddapah district, the tree abounds, particularly on the ridges of the hills from Balpalli to Yerragunta Cottah, in short over all the ridges of the hills in the Cuddapah district, growing to a height from 30 to 35 feet, and from 6 to 7 feet in circumference. It is there chiefly used for house-building purposes, being much prized by the natives of the district, on account of its durability. Its wood is used for fuses. It yields a large quantity of the resin called "dammar," which is employed in marine yards as a substitute for pitch, but used also as benzoin in temples for incense.—*Roxb. Fl. In.* ii, 617, *Voigt*, 125, *Dr. Appavoo, Assistant Conservator of Forests, in charge,—in letter No.* 1,236*A of* 6*th November* 1862.

SIBIA, *Species. McCl.* Thit-phew, BURM. This tree is very plentiful in Prome, Pegu and Tounghoo, as well as about Donabew. It yields a compact and close-grained wood, seven or eight feet in girth, and is a timber that deserves to be attended to with a view of bringing it into use, being adapted for fancy work and cabinet making.—*Dr. McClelland.*

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SIBIA GLOMERATA.

Thayat-pew tha BURM. | White Thayat.

A tree of Amherst, Tavoy and Mergui. This seems to be the same as the Thit-phew of McClelland. Captain Dance says its maximum girth is 5 cubits, and maximum length 30 feet, and that it is found abundant on the sea coast from Amherst to Tavoy and Mergui. When seasoned, it floats in water. He remarks that the term, Thayat-pew, should be cancelled as, meaning merely white wood, it is a name equally applicable to "Calophyllum longifolium," "Dillenia speciosa," to a species of Dalbergia and to other woods. The wood called "Yemam-nee," is often styled by this name.—*Captain Dance.*

SIDDHA, TEL.? URIA? A tree of Ganjam and Goomsur, of an extreme height 45 feet, and circumference of 4 feet, the height from ground to the intersection of the first branch, 22 feet. This wood is said to be not liable to be attacked by insects. It is used chiefly for rafters and being rather plentiful, is burnt for firewood. The bark and leaves are employed in tanning leather and are also used medicinally.—*Captain Macdonald.*

SIKHAMHAT, HIND.? A tree of Chota Nagpore, has a hard, yellow timber.—*Cal. Cat. Ex.* 1862.

SIMAN, HIND.? A tree of Chota Nagpore, with hard, grey timber.—*Cal. Cat. Ex.* 1862.

SIMJANG, HIND.? A tree of Chota Nagpore, with a soft, yellow, wood.—*Cal. Cat. Ex.* 1862.

SIND. Of the forests scattered throughout Sind, particularly those in Lower Sind, the greater number are planted—not natural forest. In passing over the hills from Sonda en route to Jerruck, the noble river is seen at the distance winding its way through gigantic woods. The forests, under the rule of the Ameers, were mere hunting preserves, and were admirably adapted from the thickness of their underwood, for the cover of wild animals of every sort. No attention whatever was paid to their timber. The forests in number amount to about 72, including the Sind forest jungles in Upper Sind (not walled in like those in Lower Sind) of bhan or poplar, which spring up spontaneously on the river bank when the inundation subsides. The forests cover an area of about 1,59,688 acres, under cultivation about 34,555, waste land 55,385, and wood area 69,753. The products of the forests are timber, firewood, charcoal, gum lac, bark, babul seeds, grass and reeds for mats. The common woods found are babul, bhan, kunda, tali (Sissoo of Upper India), tree tamarisk, jamul, sirree and mountain or bitter neem. These have been turned to economic purposes since the British occupation of the country. The grazing alone brings in a revenue of between eight to nine thousand rupees per annum. The supply of fuel to the Indus Flotilla was about 90,000 maunds per annum, and, with the other products, gave a gross revenue of not less than 1,20,000 rupees. It is said the forests are yearly diminishing in size from their being washed away by the encroachments of the river and from the canals, which run through them, not being cut, as they used to be during the time of the Ameers, to admit water for watering the trees. The Sirree is the Madras blackwood, the Tali or blackwood of Upper India, and it and the guz or tree tamarisk, are found in many of the forests, but in small numbers. Dr. Gibson (Reports 1857-60, page 20) mentions the successful efforts made by Captain Hamilton to restore the much destroyed forests of Upper Sind, and that officer's opinion was concurred in by the Commissioner, of the importance of appropriating for forest all the new land thrown up by the river. In the Report for 1859-60, submitted to Government on the 23rd of April 1860, by Mr. Dalzell, Forest Ranger in Sind, it is shown that the revenue from the Sind forests in 1859-60 was Rs. 98,884-2-0, against Rs. 72,150-5-0 the previous year. The net surplus was Rs. 43,884-2-0 being nearly double that of 1858-59. The chief item in the receipts was that for firewood, which amounted to Rs. 44,000, the next was "grazing fees," which yielded Rs. 30,700. The price of firewood was raised, owing to the increased price of labour, by 20 per cent., except when intended for steam navigation. The price of rafters in the forests near a market was raised 25 per cent. Mr. Dalzell thinks that while the appropriation of forest land for purposes of cultivation would not benefit the revenue, as regards climate, the interests of agriculture, the progress of commerce, and the general prosperity of the province, doing so would gradually lead to the most serious consequences. The indiscreet destruction of the forests of any country is apt to bring upon future generations three calamities, the want of fuel, the want of water and the want of timber—three things peculiarly necessary to Sind. Every steamer on the Indus, while under steam, consumes one ton of fuel per hour. It would be too hardy an assertion to say that the existence of forests in Sind causes any increase in the fall of rain, as they certainly do on the summits and slopes of mountains, yet in Sind not only is the rain that falls economised and prevented from rapid evaporation, but the water of inundation also, which sinks deep into the ground, is being continually pumped up from great depths by the roots of the trees, and exhaled by the leaves, thus actually moistening the neighbouring atmosphere in the driest weather, and benefiting the crops of the neighbouring fields, without the ignorant zemindar, who considers forests a nuisance being aware of the blessing. In passing through a tamarisk jungle early in the morning, even in the driest weather, the whole of the foliage is found dripping—not from dew, but from the water of exhalation brought up from great depths by the vital processes of vegetation ; the whole of this passes into watery vapour in a few hours. If the forest were cleared away, the neighbouring fields would be exposed to the violence of parching winds, and liable to be covered with drifting sand, while the cattle of the cultivator would find no grazing and no shelter from the scorching heat. It has been found, that forests and plantations in Britain yield in the long run a much higher rental than if the ground on which they stand had been given up for cultivation. Land under wood in Great Britain will, at the end of sixty years, under good management, pay the proprietor nearly three times the sum that he would have received from any other crop upon the same land. Even in Sind those forests which are tolerably near to a market will bear comparison in point of profit with some of the most favoured zillahs of the province. To take a fair example ; a certain district in the valley of the Indus contains 2,24,586 beegas, of which 1,65,008 are culturable and 42,601 or one-fifth, actually cultivated in 1858-59. The revenue of this district was in that year Rs. 32,240, or deducting charges Rs. 29,000 which is equal to two annas per beega. The forest of Oomerpoor contains 18,000 beegas, yielding after deduction of all expenses of establishment, &c., a nett profit of Rs. 4,500, or four annas per beega. The forest of Meeanee yields the same. In their resolution on the Report, Government say that they fully recognise the importance and advantages arising from the conservation of the forests of this country.—*Scindian, July* 12, 1856, *Annals of Indian Administration, March* 1861.

SINGAPORE WOODS, from Singapore and the Malay peninsula at the 1851 Exhibition, about one hundred specimens of woods were sent, many having no labels ; those named were as follow :—

1 Angsanah.
Billong.
Billong Wangi.
Bras Bras.
Bitangor wood.
Chungla.
Glam.
Jambu ayer utan.
Kayan Arang.
10 Kamuning.
Krantai.
Arangi.
Arangi Klat.
Kayu Brombong.
Kledang.
Lakah wood.
Leban.
Meesbon.
Medanal Miniak.
20 Medanal Buahyeah.
Medanal Tanduh.
Medanal Kitanshan.
Medanal Konit.
Polai wood.
Peragah.
Ranggas.
Simpoh Ryah.
Simpoh brekit.
Slumar.
30 Tan Pang.
Tampanis.
Timbusu.

Mr. Cameron gives the following Singapore woods : the word "Kaya," wood, is prefixed to each :—

K. Api Api.
K. Ara.
K. Assam Jawa.
K. Babi Kooroos.
K. Babuta.
K. Bagu.
K. Bakkaw.
K. Ballong Ayam and Seram.
K. Baroo.
K. Bayas.
K. Bayor.
K. Bedara.
K. Benar.
K. Binnoo.
K. Bintangor.
K. Bintaro.
K. Bittoot.
K. Bongor Ayer.
K. Boonoot.
K. Boonga.
K. Bransan.
K. Bruas.
Buluh or Bamboo.
B. Bittang.
B. Bitting.
B. Duri.
B. Gading.
B. Siggei.
B. Trimiang.
K. Butabuta.
K. Kayu Chicha.
K. Chindrai.
K. Chingei.
K. Chirmei Burong.
K. Chumpada Ayer.
K. Dammar etam.
K. Dammar meniak
Kayu Dammer.
K. Doongoon.
K. Durian and Durian Burong.
Fir.
K. Gading.
K. Gharoo.
K. Gillam Tikoos.
K. Giyum.
K. Ipel.
K. Ipoh.
K. Jaring.
K. Jawi Jawi.
K. Jimirlang Sittooei.
K. Julutong.
K. K. Kaledang.
K. Kalookoob.
K. Kammiyan.
K. Kayu Kamooning.
K. Kananga.
K. Kapini.
K. Kayu arang, or Siam wood.
K. Kattong.
K. Killat.
K. Kayoo Koolim.
K. Kayu Koolit.
K. Kranam.
K. Krangei Laut.
K. Kranji.
K. Krooing.
K. Mara lilin.
K. Maranti.
K. Maroonggei.
K. Matati.
K. Meddang Benar.
K. Meddang Kamangi.
K. Meddang kuning.
K. Meddang Sila.
K. Meddang Soory.
K. Mengoopoos.
K. Merabau.
K. Merabau Etam, or K. Tundo, or M. Darah, K. or M. Rengkone, are varieties.
K. Middang Bunga.
K. Middang Kunyit
K. Middang Serai.
K. Mirapoo.
K. Moon Tapoos.
K. Morlajam.
K. Muddang-leber-daun.
K. Nibong.
K. Nipis Kulit.
K. Niris Battu.
K. Niris Bunga.
K. Nunka or Jack.
K. Nunka Pipit.
K. Langadei.
K. Laut.
K. Limpong.
K. Pangkap.
K. Passat Linga.
K. Kayu Penga.
K. Pinang Purgam.
K. Pinang Pi-sang.
K. Pittaling.
K. Prea Laut.
K. Pulei.
K. Roro, Arrow.
K. Rossach.
Rottan the ratan.
R. Binni or Dimri.
R. Bumban.
R. Dhannan.
R. Jomang.
R. Kawat,
R. Ligor benar.
R. Mannau.
R. Oodang.
R. Saboot.
R. Salak.
R. Samamboo.
R. Sigga.
R. Sinnee.
R. Tawar.
R. Tiga Sagi.
K. Rummiyah.
K. Runggas.
K. Sagina or Ramoongei.
K. Sannai.
K. Seeat.
K. Kayu Singam.
K. Sudoo soodoo.
K. Srayan.
K. Srean.
K. Tabangow battu
K. Tamak bukit.
K. Tampenes.
K. Tampenes putih
K. Tampang Bissee
K. Tatati.
K. Tinkaras.
K. To Joak.
K. Toomoos,
K. Tummak.
K. Tumoossooh.
K. Tumpang.
K. Tumpayan amas

—*See* MALACCA, SUMATRA, PENANG.

SI-PAIT, MALAY. Meaning the "bitter wood," is the root of a tree of Sarawak. In substance, appearance and lightness, it precisely resembles the Plye ; but, while Plye is tasteless, Si-pait is very bitter to the taste.—Pait, in Malay, means bitter.—*Low's Sarawak*.

SIPHONANTHUS INDICA?

Patri. HIND. ?

A tree of Chota-Nagpore, with a soft, white wood. (*Note*.—Major Beddome says that this is not S. Indica.)—*Cal. Cat. Ex.* 1862.

SISAGI, HIND. A tree of Chota Nagpore, with hard, white timber.—*Cal. Cat. Ex.* 1862.

SITPHAN, BURM., ALSO SETPHAN, BURM. A tree of Moulmein. Its wood is used in common purposes of building.—*Cal. Cat. Ex.* 1862.

SNAKE WOOD, a commercial term, applied to the woods of Strychnos colubrina, St. nux vomica, Ophiorhiza mungos of Java, and Ophioxylon serpentinum of Amboyna.

CSL

S[illegible]OJO MAREE, Tel. ? Uria ? A tree of Ganjam and Goomsur, of extreme height 25 feet, circumference 1½ feet, and height from the ground to the intersection of the first branch, 8 feet. Tolerably common in Bodogoda, where it is burnt for firewood but not in Goomsur. The bark is used medicinally.—*Captain Macdonald.*

SOMENDILLA, the Tamil and Malabar name of a tree yielding the best and most useful wood in Ceylon for naval purposes. It is commonly called Halmilile and Hameniel, by the Dutch and Portuguese. It grows straight, from twenty to forty feet high, and from twelve to thirty inches in diameter. This tree, with the satin wood, is the most plentiful and valuable found in Ceylon ; and can be obtained at a moderate rate to answer the demands of a navy in India : it may be considered superior to any wood for capstain bars, cross and trussel-trees, cask staves, battens for yards, fishes for masts, boat-building, &c. At Madras, it is highly valued for coach work from the toughness and fineness of its grain.—*Edye on the Timber of Ceylon.* (*Note.*—Mr. Mendis says Hal-milile is the Berrya ammonilla, the Trincomallee wood of commerce).

SONNERATIA ? *Species ?*

Thaumma. Burm.

A small tree of Tavoy, wood not known.—*Dr. Wallich.*

SONNERATIA ACIDA, *Willde, Linn.*

Rhizophora caseolaris, *Linn.*
Mangium caseolare, *Rumph.*

Orchaka. Beng.
Sour sonneratia. Eng.
Ceylon cork tree ,,
Blatti. Maleal of Rheede.
Gedde killala-gass. Singh.

This tree yields a light, soft, white, wood. It grows in Ceylon, on the coast at Caltura and Negombo and, other places ; grows also on the western and eastern coasts of peninsular India, at Salsette and, in the delta of the Indus, the supply is said to be inexhaustible. It grows in the northern Circars and, also, in the deltas of the Ganges and of the Irrawady. Indeed, in British Burmah, it abounds in the mangrove swamps and on the banks of almost every stream on the coast as far as tide-waters reach, the natives use it for various economical purposes, and it is said to be "a better substitute for coal in steamers than any other kind of wood." It grows in Malacca, Penang and Singapore.—*Wight and Arn., Vol. I, p.* 327, *Roxb. Fl. Ind., II,* 506, *Voigt,* 50, *Dr. Mason, Mr. Thwaites.* (*Note.*—Is it the Polai of Penang and Singapore, and the Plye of Borneo ?)

SONNERATIA ACIDA. ?

La moo. Burm.

A tree of Moulmein. An inferior wood for boats, which lasts but for two or three years. The fruit is an article of food.—*Cat. Cat. Ex.* 1862. (*Note.*—What is this tree ? It cannot be S. acid.—*Willde.*)

SONNERATIA APETALA, *Buch.*

Khoura. Ben.
Keora. ,,
Kumbala. Burm.

A pretty large and elegant tree, which grows in the Bombay side of India, in the delta of the Ganges, and is found under the parallel of Rangoon. It flowers in the hot season. It yields a strong hard wood of coarse grain. It is the timber of which boxes for packing beer and wine are made in Calcutta, is of a red colour, strong and adapted for house-building.—*Drs. Roxb., Vol. I, p.* 327, *Voigt, McClleland, W. & A.*

SOOGOONDHI, Uria ? A tree of Ganjam and Goomsur, of extreme height 25 feet, circumference 2 feet, and height from the ground to the intersection of the first branch, 7 feet. This tree is tolerably common, but no use is made of the wood except for firewood, the leaves are used medicinally for rheumatism and wounds of long standing.—*Captain Macdonald.* (*Note.*—This has been supposed to be a species of Calophyllum, and requires to be identified.)

SOORYA, Singh. A timber tree of the central and western provinces of Ceylon, wood admirable for carriages, hackeries and gun-stocks, also useful for blocks and buildings. A cubic foot weighs 49 ℔s., and it is calculated to last 20 to 40 years.—*Mr. Mendis.*

SOORIVA MARA, Singh. Under this name, Mr. Mendis describes, as a species of Mimosa, a plant of the central province of Ceylon, the wood of which is used for buildings and common for furniture. A cubic foot of it weighs 42 ℔s. The wood is calculated to last 20 to 30 years.—*Mr. Mendis.*

SOROOPOTTREE MOEE, Uria ? Tel. ? A tree of Ganjam and Goomsur, extreme height 40 feet, circumference 2½ feet, height from the ground to the intersection of the first branch, 18 feet. Used for planks, doors, boxes, posts, ploughshares. It is tolerably common —*Captain Macdonald.*

SOONDA. A district in the south of the Bombay Presidency, bordering on North Canara. It contains large forests, which, up to 1855, were under the charge of the Bombay Conservator, but were then transferred to Madras. Dr. Gibson's Reports (1849 to 56, page 60, and 1857 to 1860, page 17) indicate that the timber has greatly decreased in amount. In the transfer of Canara to Bombay, this district has been re-transferred along with it.

SOONDOROGOYAN BANSO, Tel. ?

GSL

U[illegible] In Ganjam and Goomsur, circumference 3¼ feet, extreme height 30 feet, two species of bamboo which are not common.—*Captain Macdonald.*

SOUTHWELLIA, a genus of which there are nine species in the South and East of Asia received from the genus Sterculia.

SOWAY DO, Burm. A tree of maximum girth 1½ cubits, and maximum length 10 or 12 feet, very abundant on the sea coast and on the banks of rivers in the Tenasserim provinces. When seasoned it floats in water. The wood is much recommended for gunstocks with but one fault, that it is crooked, and therefore not more than ten or twelve feet can be procured between the bends. This wood is commonly sold to Burmese at half a rupee for a piece large enough to make one gun-stock.—*Captain Dance.*

SOW-YEW, Burm. The Egg tree of the Karen, and Chisel handle tree of the British in Burmah. This is stated by Dr. Mason to be of the genus Dalbergia, *species* unknown, Its maximum girth 2¼ cubits and maximum length 10 feet. Found scattered all over the Amherst, Tavoy and Mergui forests inland; always found in undulating ground only, not near water. When seasoned it floats in water. It is used by Burmese in preference to any other for handles of chisels and tools, also for helves of axes and hatchets. It is a very hard, fine grained-wood, which is strongly recommended for helves and handles of all kinds of tools, and is unequalled for those tools, such as chisels, which are struck with a hammer or mallet. This wood is of a yellowish white in colour with patches of black interspersed, looking as if iron had in some manner been drawn from the soil, and incorporated in the wood. Though widely scattered, it is in such demand as always to be procurable in the markets.—*Captain Dance.*

SOYMIDA FEBRIFUGA, *Ad. Juss.*

Swietenia febrifuga, *Roxb., ii,* 398, *Cor. Pl. W. & A.*
„ rubra, *Rottler.*

Rohuna.	Beng. Hind.	Wonga maram.	Tam.
Rohan.	„	Shem maram.	„
Red-wood tree.	Eng.	Choar Kullie marani.	Tam.
Bastard cedar.	„	Wond maram.	Tam.
Robitaka.	Hind.	Somi.	Tel.
Rheyn.	Mahr.	Somida manu.	Tel.
Rohuni.	„		

This large forest tree, is a native of several of the mountainous districts in India, of the Coimbatore and Cuddapah districts, of the Godavery forests and the Rajahmundry circars; also, in the northern Bombay forests, where it is more common in those inland, as on the Satpura range, than in the forests of the coast. It is in considerable abundance, however, in various parts of Guzerat, also at the Sindhwah-ghat and in the Adjunta and Jowar jungles. It is very abundant in Nagpore, and grows in the Chunar hills and in the jungles south of Hazareebaugh, indeed in all the central and southern parts of India. The wood is light and easily worked, and is reckoned durable and strong, and good for in-door or cabinet purposes, but not adapted to those requiring exposure to sun and weather. Captain Beddome, however, says it never rots under ground. In the Cuddapah district it is much used in buildings. Writing of it in Nagpore, Captain Sankey quotes a writer in the Bengal Gazette, as remarking that the Rohun is a mahogany, furnishing a febrifugal bark, and believed to be one of the most durable and heavy woods known, and of a "blood-red colour." The specimens which Captain Sankey obtained, he says, might be called somewhat darker in colour than here described, and in Nagpore the logs are obtainable from 17 to 20 feet long and 4 to 3½ feet in girth, at 5 annas the cubic foot. In weight, the wood is much greater than water, but by all native accounts it is, in Nagpore, far from a durable wood, in exposure splitting greatly, and when seasoned becoming extremely brittle. It nevertheless, he adds, has a fine straight grain, and is not so difficult to work as its great weight and compactness would lead one to imagine. But, notwithstanding this and the fact that it rivals the finest English oak in strength, he hesitates to recommend it as a building material. On these observations, Major Pearson remarks, (on the *Soymida febrifuga,*—Hind. Rohun or Rohnee) I think Captain Sankey must have mistaken this timber. It is certainly heavy and coarse, one of the stoutest and best lasting timbers we possess. The bark is a useful tonic in intermittent fevers.—*Drs. Wight, Gibson, O'Shaughnessy Cleghorn, Voigt, Roxb., Fl. Ind., Vol. II., p.* 398, *and W. & A., Vol. I, p.* 122, *Captain Sankey. Major Pearson.*

SPATHODEA, *Species?*

Thit-linda. Burm.

A white wood of British Burmah, not much used. A cubic foot weighs lbs. 63. In a full-grown tree on good soil, the average length of the trunk to the first branch is 50 feet, and average girth measured at six feet from the ground, is 6 feet. It sells at 8 annas per cubic foot.—*Dr. Brandis.* (*Note*—Is this any of the trees now of the genus Bignonia? q. v.)

SPATHODEA ADENOPHYLLA, Singh.

Palol. Singh. | Ela-Palol. Singh.

A small tree, occasionally found in Ceylon gardens. It was introduced from Burmah into the agri-horticultural gardens at Madras. Its bark is medicinal.—*Thwaites; Cat. Madras Gardens, Major Beddome.*

CSL

SPATHODEA ARCUATA, *W. Ic.* 1340.

Mersingi.	Mahr.	Ran-palai maram.	Tam.

A small or middle-sized tree, common in the Walliar forests of Coimbatore and in the forests on the Bombay coast. It furnishes a strong wood, used by the turner.—*Drs. Wight and Gibson.*

SPATHODEA LONGIFLORA.

Daanga. Singh.

This arboreous plant has large yellow and very fragrant flowers. According to Mr. Mendis, it grows in the northern and western divisions of Ceylon, where its wood is said to be used for buoys for fishing nets, but this point seems to require confirmation. It is said, in the English Cyclopædia, to be plentiful on the hills of the Malabar and Coromandel coasts, and its wood is described as high coloured, hard and durable, and of much use among the inhabitants.—*Mr. Mendis, Eng. Cyc.* (*Note.*—What is this plant: it is not mentioned in Roxburgh's Fl. Ind., Wight and Arnott or Voigt?)

SPATHODEA RHEEDII, *Spreng.*

Spathodea longifolia, *Vent.*
Bignonia spathacea, *Linn. fil. suppl.*
,, falcata, *Kœn's MSS.*

Tha-khoot-ma.	Burm.	Vodi.	Tel.
Nir pongilam.	Maleal.	Udi.	,,
Deya danga-gass.	Singh.	Wodi.	,,

This small thin tree, a native of the west of Ceylon, in the hotter parts of the island and in the forests of the coast, is met with also in the peninsula of India, in the forests of the Northern Circars and of the Godavery and in British Burmah. The trunk is very irregular. In a full-grown tree on good soil, the average length of the trunk to the first branch is 30 feet, and, at 7 feet from the ground, the average girth is 7 feet. A cubic foot of the wood weighs lbs. 35. It is strong, of a whitish colour, and in Burmah, where it sells at 8 annas the cubic foot, it is used for yokes and cart poles.—*Voigt*, 477, *Thwaites, Roxb., Fl. Ind., III*, 130, *Eng. Cyc., Dr. Brandis, Captain Beddome.*

SPATHODEA ROXBURGHII, *Spreng.*

Bignonia quadrilocularis, *Roxb. : Cor. Pl. II, and Fl. Ind., III, p.* 107.

Baro kala goru. Hind.? Tel.?

This large tree, has a straight trunk and is of considerable height. It flowers in the hot season with spreading branches and large rose-coloured and delightfully fragrant flowers, and is remarkable for its leaves of which buffaloes are very fond. Its wood is used for many purposes.—*Roxb., Fl. Ind. III., p.* 107, *Voigt*, 477, *Captain Beddome, Eng. Cyc.* (*Note.*—See under its synonym, Bignonia quadrilocularis, which see.)

SPATHODEA STIPULATA, *Wall.*

Bignonia stipulata, *Roxb.*; *Fl. Ind., III., p.* 108.

Pact-than. Burm.

A large tree of British Burmah, wood used for bows and spear handles, also for paddles and oars. A cubic foot weighs lbs. 48. In a full-grown tree on good soil the average length of the trunk to the first branch is 20 feet, and average girth measured at 6 feet from the ground is 4 feet.—*Voigt*, 477, *Roxb., Fl. Ind., III., p.* 108, *Dr. Brandis.* (*Note.*—This has been noticed under its synonym, Bignonia stipulata, which see).

SPATHODEA SUAVEOLENS, *D C.*

(*c. p.* 1960.) In the south of Ceylon it is sometimes to be found in the neighbourhood of Buddhist temples, but Mr. Thwaites could not hear of its occurring truly wild. Its roots are much valued by the natives as a tonic medicine, and they attribute the same properties and give the same name ("Palol") to those of Spathodea adenophylla, which is occasionally found in gardens.—*Thwaites.*

SPONIA ? *Species?*

Tella kaka mushtee. Tel. of Circars.

Captain Beddome says that this appears to be Celtis Wightii of Wight's Icones, and is one of the hardest woods he had ever met with—light-coloured and well worthy of attention.—*Captain Beddome.*

SPONIA ? *Species*

Bhatoo. Hind.

A tree of Kumaon and Gurhwal. Its timber is hard, heavy, fine-grained, and used for wedges. Its leaves are stiffly set with small spines, and are used as sandpaper.—*Mr. Thompson.*

SPONIA ORIENTALIS, *Voigt.*

Papyrus sphærica, *Kœmpf.*
Celtis orientalis, *Roxb., Fl. Ind., Vol. II., p.* 65.

Chicon?	Beng.	Indian Nettle tree.	Eng.
Jeebun.	,,	Morali chettu.	Tel.
Chickolee of Central Provinces.		Budu muru.	,,

A small erect tree of Ceylon, the Coromandel coast, common along the foot of the ghats, and occurs in the Kennery forests, Salsette, in Bengal, Nepaul, Sylhet, and Assam. Roxburgh says it is neither useful nor ornamental, but, in Ceylon, though soft and light, it is used for ordinary purposes. Voigt mentions that the under bark consists of numerous reticulated fibres, and forms a natural cloth used by the Garrowrace, and that its leaves are used for polishing horn.—*Roxb. Fl. Ind., II., p.* 65, *Voigt, p.* 294, *Flor. Andh., Messrs. Jacob and Fergusson.*

SPONDIAS ACUMINATA, *Roxb.*

Ambut. Duk.

A most elegant middle-sized tree, with

shining leaves. It grows on the western side of India, being sufficiently common in all the Bombay forests, both coast and inland. The wood, in its natural state, is not of any value, but could be creosoted with advantage.—*Voigt*, 144, *Roxb., Fl. Ind. II.*, *p*. 453, *Dr. Gibson.*

SPONDIAS DULCIS, *Forst.*

S. cytheræa, *Sonn.*

Bilate amra. Beng.
Brazilian plum. Eng.
Otaheiti apple tree. Eng.
Vi of Society Islands.

This is cultivated in India, is abundant in the Society Islands; it is lofty and handsome, rising to 60 feet with a circumference of 12 or 15 feet. At Tahiti the wood is valued for making canoes.—*Roxb.*, ii, 452, *Voigt.*, 144, *Bennett's Gatherings.*

SPONDIAS MANGIFERA, *Pers.*; *Roxb*; *W. & A.*, *Vol. I*, *p*. 173.

Spondias amara, *Lam.*
„ amra, *Ham.*
„ paniculata, *Roxb. in E. I. C. M.*
Mangifera pinnata, *Kœn.*
Poupartia mangifera, *Blume.*
Condondong of *Rumph.*

Amra. Beng. Hind. Tel.
Ambalam „ „
Jangli am. Duk.
Wild mango tree. Eng.
Hog-plum tree.
Ambara. Hind. Tel.
Am. Mahr.
Ambalam. Maleal. of Rheede.
Kat ambalam. Maleal.
Amrataca. Sans.
Canana amra. Sans.
Kat maam maram. Tam.
Mirri-mangi maram. „
Kát mavu. „
Ambála chettu. Tel.
Juvru mamidi. „
Pita vrikshamu. „
Amatum. „
Adavi mamidi. „
Ambud'ha? Uria?

This is a large tree in the Coromandel mountains, but, as a cultivated plant, it is small. It flowers in the hot season. It grows in various parts of India in some, as in Ganjam and Goomsur, is sufficiently common. It there has a straight trunk and attains an extreme height of 30 feet, with a circumference of 2½ feet, and its height from the ground to the intersection of the first branch, is 7 feet. The wood is soft and brittle and of little or no use, except for firewood. From wounds made into the bark, in the beginning of the hot season, very large quantities of a transparent juice issue, which soon hardens into a mild insipid gum, like gum-arabic. Ainslie tells us that the fruit got its name from its resemblance to a mango, but it is harsh and little deserving of notice: and, Rheede informs us, that on the Malabar coast, the root is considered as emmenagogue; the bark is supposed to be of use in dysenteric affections and a decoction of the wood serviceable in gonorrhœa.—*Ainslie*, *p*. 222, *Roxb.*, *Vol. II*, *p*. 451, *Voigt*, 143, *Wight and Arnott*, *Vol. I*, *p*. 173, *Voigt*, *p*. 143, *Captain Macdonald*, *Dr. J. L. Stewart.*

STAPHYLEA EMODI. ?

Nagdaon.
Mar chob of Persian and Pushtu, "snake-stick."
Kaghaniya of Kanawar.
Chira of Murree and Hazara.

Used by the Siwalik hill-people, who consider it a charm against snakes, hence its name of "nag-dawan," snake subduer.—*Powell, Hand-book, Econ. Prod., Panjab*, *p*. 597, *Dr. Stewart*, *p*. 40.

STEMONOPORUS, *Thwaites.*

A genus of Ceylon plants, small or large trees, but the character of their woods is not known. The S. affinis, *Thw.*, is a large tree, growing in the Hunasgiria district, at an elevation of 4,000 feet. S. canaliculatus, *Thw.*, a moderate sized tree, of the Hinidoon and Reigam corles, at no great elevation. S. Gardneri, *Thw.*, a great tree, near Adam's peak, at an elevation of about 5,000 feet. S. lanceolatus, *Thw.*, is a small tree near Ratnapoora, at no great elevation. S. Moonii, *Thw.*, near Maturatte. S. nitidus, *Thw.*, at Pasdoon corle, a middle sized tree, at no great elevation. He also mentions, S. oblongifolius, S. petiolaris, S. reticulatus, S. rigidus, and S. Wightii, a great tree, the Vateria Ceylanica of Wight, and S. apicalis a great tree of the damp forests, at an elevation of 1,000 to 2,000 feet, the "Ooroo-kannoo gass" of the Singhalese.—*Thw.*, *p*. 43.

STERCULIA.

A genus of plants, many of them large trees, of which several species are found in India. Sterculia urens is a native of the mountains on the coast of Coromandel, as well as of Hindostan, and yields a gum exceedingly like tragacanth, which has been imported as such into England. S. guttata yields a bark that the Malabar people convert into a flaxy substance and of which the natives of Wynaad make a sort of clothing. As the seeds of Sterculia chica are eaten by the Brazilians, so, in India, are those of S. balanghas, S. urens and S. fœtida, after being roasted. Several trees formerly arranged in this genus, have been transferred to the genus Southwellia, amongst others St. versicolor of Segaen; *Wall*,; St. lanceolata, *Cav.*; of China; St. populifolia *D.C.* not Roxb.;, of Timor. St. macrophylla, *Vent* of Pondicherry; while St. scaphigera, *Wall*, of Martaban has been transferred to Scaphia, and St. platantfolia L. fil. of China, to Firmiana.—*Roxb.*, *Fl. Ind. III*, *p*. 149, *Royle*, *Ill. Him. Bot.*, *p*. 102, *Voigt.*

STERCULIA, *Species.*

Ku-nu-nu. Burm

An enormous tree of Tavoy.—*Dr. Wallich.*

STERCULIA, *Species.*

Thi-ka-doo. Burm.

A Tavoy tree.—*Dr. Wallich.*

STERCULIA, *Species.*

Kodalo. Tel.

A tree of Ganjam and Goomsur, extreme height 39 feet, circumference 3 feet, and height from ground to the intersection of the first

GSL

branch, 8 feet. Gives a light wood, used for planks, doors, boxes and scabbards ; it is also used for firewood, being tolerably plentiful.—*Dr. Cleghorn, Captain Macdonald.* (*Note.*—It is not S. fœtida.)

STERCULIA, *Species.* A nar or bast from a species common on the higher elevations in Wynaad, is as durable as ordinary, but inferior to the best, Russian bast.—*Mr. McIvor, M. E. J. R.*

STERCULIA ALATA, *Roxb., Vol. III. p.* 152.

Buddhs cocoanut. English in Burmah.
Dodeleo mara. CAN.

Grows to an immense height in Canara and Sunda, in deep ravines and sheltered places below the ghats but is used there only as a support for pepper vines. The wood is said to be too spongy for spars, for which its height and straightness otherwise well fit it. It is described, by Dr. Mason, as a handsome tree of the Tenasserim provinces, bearing a large fruit whose winged seeds are sometimes eaten by the natives.—*Drs. Gibson and Mason, Roxb., Vol. III, p.* 152.

STERCULIA AUGUSTIFOLIA, *Roxb.*

Southwellia angustifolia,

A middle-sized tree, a native of Nepaul and Penang.—*Roxb., Vol. III, p.* 168, *Voigt.*

STERCULIA BALANGHAS, *Linn.*

Southwellia balanghas, *Sch. and End.*
Kavalum. TAM.

A tall and straight tree, of the hotter parts of Ceylon : common in the forests of the Bombay coast, where it may readily be distinguished, at certain seasons, by its large pink fruit. The wood is of open grain, so that by being creosoted, it probably could be made useful in various ways. The seeds are roasted and eaten by the natives of Amboyna and the capsules burned for the preparation of the colouring matter called by the natives kussumbha.—*Dr. Gibson, Thwaites, Eng. Cyc., W. & A., Vol. I, p.* 62.

STERCULIA COLORATA, *Roxb.*

Bhai. ? DUK.
Karaka. DUK ? TEL.

A large tree of the Dekhan and in the Godavery forests, which is deciduous in the cold season, and flowers in March and April. Grows at Courtallum, the wood is said to be useless.—*Dr. Riddell, Captains Macdonald and Beddome, W. & A., Vol. I, p.* 63.

STERCULIA FŒTIDA, *Linn.* ; *Roxb.* ; *W. & A.* ; *Ic.*

Jangli badam. BENG.
Let khop. BURM.
Fetid sterculia. ENG.
Horse almond tree. ,,
Bastard poon. ,,
Klompanboerong. MALAY.
Karill. MALEAL.
Telembhoo. SINGH.
Kudrapdukhu. TAM.
Pinnari maram. ,,
Pinata maram. ,,
Pinary maram. ,,
Gurrapu badam chettu. TEL.

The oil.
Gudira pusjun yennai. TAM.

This large tree is very common in the central province of Ceylon, where a cubic foot weighs 26 lbs., and it grows in the peninsula of India, generally, but chiefly on the western coast in Malabar and Mysore. On the Bombay side of India, it is not common in the forests, but is more frequently found about cultivated holdings on the coast, where it grows up small and very straight. It is common on the hills and plains of British Burmah, where a cubic foot weighs lbs. 33. In a full-grown tree, on good soil, the average length of the trunk to the first branch is 50 feet, and average girth, measured at 6 feet, from the ground is 10 feet. Dr. Brandis tells us that the wood is not used there. But, in Ceylon, it is used for common house-building purposes, on the western coast and in Mysore, it is applied to a number of useful purposes, and is one of the trees believed to furnish the smaller poon spars of that coast : indeed, Dr. Gibson tells us that it is used as a substitute for the true poon spars in small country vessels. Major Beddome deems this to be a mistake on the part of Dr. Gibson, who, however, writing from Europe in 1864, repeats it. The seeds are eaten by the Singhalese.—*Ainslie, Mr. Mendis, Drs. Brandis, Gibson, Roxb.* iii, 154, *Voigt,* 103, *M. E. J. R., Riddell, Wight and Arnott, Vol. I, p.* 63, *Thwaites, p.* 29.

STERCULIA FOLIIS DIGITATIS, *Ains.*

Hill cocoanut ENG.
Malai taynga. TAM.
Conda than-kaia. TEL.

The edible seeds of this tree are eaten by the poor. They are contained in follicles, each of which is nearly as large as two hands joined. —*Ainslie, p.* 227. (*Note.*—Is this S. fœtida ?)

STERCULIA GUTTATA, *Roxb.*

Goldar. DUK.
Pi maram. TAM.
Ramena pu maram. TAM.
Kawilli in Annimullay.

A large forest tree, of Ceylon and Malabar, but occurring in the Dekhan. The character of its wood is not known. Its inner bark abounds with very indifferent white flaxen fibres, these are chopped up and converted into a flaxy substance, by the natives of the coast, below Wynaad, who contrive to make them into a sort of clothing.—*Drs. Riddell, Wight, Mr. Rohde, Roxb., Vol. III, p.* 149, *W. & A., Vol. I, p.* 62, *Useful Plants, p.* 399, *Royle, Fib. Pl.*

STERCULIA PARVIFLORA, *Roxb.*

Southwellia parviflora.
Ram-julparee. HIND.

A middle-sized tree, a native of the hills east of Tipperah and of Penang, wood unknown.—*Roxb., Vol. III, p.* 147, *Voigt.*

STERCULIA POPULARIFLORA, *Roxb.*

This tree is a native of the Coromandel side of India. The bark is peculiarly smooth in young trees.—*Roxb., Vol. III., p.* 148.

STERCULIA RAMOSA. A tree of Pegu. The inner bark affords a strong and durable rope, in common use.—*Dr. McClelland.*

STERCULIA ROXBURGHII.

God-gadala.

Common to the west of the Jumna, and occasionally as far as Rajauri. A fibre is made from its bark.—*Mr. Powell.*

STERCULIA URENS, *Roxb.*

Cavallium urens.

Buli. ? BENG.
Kateria kuli ? HIND.
Kur kutila. „
Katira. „
Kundol. MAHR.

Velle butallé maram. TAM.
Vellay putalli maram. „
Kavali. TAM. ?
Thabsi. TEL.
Kavali Tel. of the Godavery

The gum.

Tshaw. BURM.

Katila ka gond. HIND.

This large tree is a native of Ceylon and of most parts of India—occurring in the peninsula, on the western coast, common in the inland and coast forests of Bombay, growing in the Ajmer hills and Kotah, and in the mountainous countries of India generally. It may always be recognised by its peculiar bark, which looks as if painted of a light colour. Wood, according to Roxburgh, is soft, spongy, and loose-grained, only fit for the most common purposes. According to Dr. Gibson, it is worthless, and this seems the correct view. Seeds are roasted and eaten by the natives, and the leaves and tender branches are of great use in certain cattle diseases. The leaves when soaked in water, render it ropy and glutinous. The bark yields a gum resembling tragacanth.—*Drs. Wight, Gibson and Irvine, Thwaites, Roxb., Vol. III, p.* 145.

STERCULIA VILLOSA, *Roxb., Vol. III. p.* 153.

Oodal. ASSAM.
Gul-kundal of Jamu.
Gul bodla of Hazara.
Masen bodla of Salt-range.
Kuri of Chenab.

Osha and God-gudala of Panjab.
Arni nar and vaccee nar of the Kader.

A large tree of the Dekhan and of the mountainous countries to the eastward of Bengal, also in the Panjab Sewalik up to 3,500 feet, and in Kumaon. It has a straight trunk with a smooth bark. The wood is not known and is likely to be worthless. The bark or rather all the layers, can be stripped off from the bottom to the top of the tree with the greatest facility, and fine pliable ropes may be made from the inner layers of bark, whilst the outer yield coarser ropes. The rope is very strong and very lasting—wet doing it little injury. Elephant ropes, bagging, and paper have been made from it.—*Dr. Riddell, Royle, English Cyclopædia, Roxb., Vol. III, p.* 153, *Dr. J. L. Stewart.*

STEREOSPERMUM CHELONOIDES, *W. Ic., DC.*

Bignonia chelonoides, *Linn., Roxb.*
Spathodea „ *DC. Prod.*

Tha-koop-poo. BURM.
Padri. HIND.
Padul. MAHR.
Padel. „
Keersel. „
Tuatuka. „
Padri maram. MALEAL.
Lunu madala. SINGH.
Goda danga. „
Ela palol. „
Vela-pathri maram. TAM.

Pon-padria maram. TAM.
Vela-padri. „ „
Pathiri-maram. „
Kala goru. TEL.
Moka yapa. „
Kaligottu. „
Tagada. „
Kaligoru. „
Kalighutru. „
Kalugoru. „
Pamphoonea. URIA.

This, though not a large, is a very handsome tree, with very fragrant beautiful pinkish flowers. It grows in Ceylon near the seas, but also up to 2,000 feet. In Southern India, it is found in Coimbatore and various parts of the Madras Presidency ; both above and below the ghats in Canara and Sunda, though not common there : in the Dekhan, it is abundant on the right bank of the Godavery and in Ganjam and Goomsur ; also in the Bombay ghats, at Khandalla, and Parr. It attains an extreme height of 20 feet, with a circumference of 1 foot, and the height from the ground to the intersection of the first branch is 8 feet. But the tree is held sacred by Hindus in consequence of which it is difficult to obtain the timber, but it is a good fancy wood, suitable for buildings. It is not common in the forests of the Bombay presidency, it is found, especially in those of the coast and ghats, but has not been observed in the inland jungles. It is highly coloured, hard and durable, and much used on the hills where it abounds. Its wood is there used for interiors of buildings, but is seldom procurable of a size fit for anything but posts. It grows in Assam and Sylhet. The wood in British Burmah is used in house-building. In a full grown tree on good soil, there, the average length of the trunk to the first branch is 30 feet and average girth measured at 6 feet from the ground is 5 feet. It sells in Burmah, at 8 annas per cubic foot. The bark and fruit are used medicinally, and the pleasant tasted and fragrant flowers are used to make a cooling drink in fevers.—*Drs Mason, Wight, Gibson, Voigt, and Brandis Thw., Cal. Cat. Ex.* 1862, *Captains Beddome and Macdonald, Flor. Andh.*

STEREOSPERMUM SUAVEOLENS, *W. Ic.*

Bignonia suaveolens, *Roxb.*, iii, 106.
Tecoma, „ *G. Don.*

Parool. BENG. MAHR.
Ghanta „
Mug „
Patalee „ SANS.

Oolooanthri mara. CAN.
Parula. HIND.
Padul, Perrol. MAHR.
Padal, Summu of Panjab.

[illegible] of Panjab.
[illegible] padari. SANS.
Krishna vrinta. ,,
Padri maram. TAM.
Kuberakoshi. TEL.
Padari. ,,
Patali. ,,
Kalagoru. ,,

This tree is frequent in the Walliar jungles in southern India. It abounds in the Soonda forests; is very rare in other Bombay forests, but is occasionally found in the Konkun, near a temple, where it has evidently been planted for the sake of its beautiful flowers. It grows in the Dandelle forest above the ghats, in Canara and Sunda. It occurs, though not very common, in Ganjam and Goomsur, where it attains an extreme height of 20 feet, with a circumstance of 1½ feet, and the height from the ground to the nearest branch is 12 feet. It also occurs in the Dekhan, in Bengal, Sukanuggur, Gorukpur, and the Kheree jungle. It grows in Kangra, Dehra Dhoon, and to a large tree in the Siwalik tract, up to the Ravi, with a useful timber, and in Kangra and Dehra Dhoon, the wood is dark-coloured strong and serviceable, long-grained, elastic, and used for buggy shafts and bows. Its wood is very similar to S. chelonoides, but is of a redder hue. The bark is employed medicinally. Mr. R. Thompson states that it grows in greatest abundance at the foot of the hills of Kumaon, that its timber is large and useful, of a light yellow colour but in the centre of a dark reddish-brown, and that logs can be had 20 to 30 feet long, and 4 to 5 feet in girth. It is largely used for the wood-work of Native buildings.—*Drs. Roxb., Voigt, Wight, Cleghorn, Gibson and J. L. Stewart, Mr. R. Thompson, Captains Beddome and Macdonald.*

STILLINGIA SEBIFERA, *Willde; Micheaux.*

Sapium sebiferum, *Roxb., Fl. Ind., Vol. III, p.* 693.
Croton sebiferum, *Linn.*

Chelat pipul. BENG.
Mom China. ,,
Tallow tree of China. ENG.

This tree, which Voigt says had been domesticated about Serampore, grows all over the eastern part of China and in Chusan, and when at its full height is a beautiful tree, with a straight trunk, and resembling the aspen in shape and foliage. It was introduced into India, and in Dr. Roxburgh's time was common near Calcutta, and Dr. Jameson says it has now been acclimatized. It grows to the height of a pear tree, with trunk and branches like the cherry and foliage like the poplar. Its kernels are coated with a pure white tallow, which is steamed off and collected. It is used for candles, and as oil for lamps, but Dr. Roxburgh says it is not equal to cocoanut oil. Character of wood not known, but in Bengal it was only considered an ornamental tree.—*Voigt, Roxb., Fl. Ind., Vol. III, p.* 693, *Drs. Williams and Rawes.*

STRYCHNOS, a genus of plants, growing in Ceylon and India. Mr. Thwaites mentions, as Ceylon plants, S. cinnamomifolia, *Thw.*, of the Hantani district, S. colubrina, *Linn.*, in the hot, drier parts of Ceylon, S. laurina, *Wall.*, at Galle and Korne-galle. S. minor, *Blume*, at an elevation of 6,000 feet, and S. nux-vomica.

STRYCHNOS COLUBRINA, *Linn.*

Kuchila luta. BENG.
Snake poison nut tree. ENG
Snake wood tree. ,,
Bois de couleuvre. FR.
Lignum colubrinum. LAT.
Modira kaniram. MALEAL?
Pao-de-cobra. PORT.
Naga musada. TEL.
Naga musadi. ,,
Modira canoram. RHEEDE.

A scandent plant with a stem of a great size, often 8 to 12 inches in diameter, growing in the hot, drier parts of Ceylon and in Malabar. The wood is of a light grey colour, hard, and intensely bitter. It forms one of the woods known in Britain as snake wood, along with those of the Ophioxylon serpentinum of Amboyna, Ophiorhiza mungos of Java, and Strychnos nux vomica. The Teling physicians regard the wood of the root as a remedy in snake bites.—*Dr. O'Shaughnessy, Eng. Cyc., Thwaites, Roxb., Fl. Ind. Vol. I., p.* 577, *Voigt.*

STRYCHNOS NUX VOMICA, *Linn., Roxb. Fl. Ind., Vol. 1, p.* 575.

Khanak ul kalb. AR.
Falus mahi. ,,
Kuchila. BENG.
Kha boung. BURM.
Kha gyee? ,, of Moulmein?
Kuchila. DUK.
Snake wood tree. ENG.
Vomit nut ,, ,,
Poison nut ,, ,,
Nux vomica ,, ,,
Kuchla. HIND.
Kuchila. ,,
Lignum colubrinum. LAT.
Jhar-katchura. MAHR.
Kariram? MALEAL.
Izaraki? PERS.
Culaka? SANS.
Cutaja. ,,
Vesha-mushti bijum. SAN
Kudaka dornatta? SINGH
Goda-kadaru? ,,
Gada-kadooroo-gass. ,,
Yetti maram. TAM.
Mutti? Qu? Yettimaram.
Yetti-cotay maram. TAM.
Musada. TEL.
Mesidi. ,,
Mushti. ,,
Mushti ganga musidi. TEL.
Korra. TEL.? of Ganjam and Goomsur.
Kunjaram of Travancore.

A small or middling-sized tree, with a short crooked trunk, which grows in the hotter parts of Ceylon, common in every part of the Madras Presidency; common in the south Konkan, particularly in shady ravines, but, on the Bombay side, does not re-appear either north of the Savitri or inland. It is a native of the southern parts of the Bengal Presidency and near Midnapore, is a very common tree throughout the forests of Pegu and extends into the Archipelago. In a full-grown tree, the average length of the trunk to the first branch is 15 to 20 feet, and average girth measured at 6 feet from the ground is 8 feet. Its timber is strong and close-grained, but never of large size: wood hard and of a white or ash colour, specific gravity 0·706. A cubic foot weighs 52 lbs. It is durable, is used for plough-shares, and cart-wheels, in Travancore, for making cots, and is adapted for fancy work and [illegible] making. It furnishes one of the snake woods of commerce. It produces the poison nut or nux vomica of commerce, the pulp of which is the favourite food of the Buceros Malabaricus, or Malabar hornbill. Iron tools are sharpened on blocks of this wood. White ants will not touch it.—*Drs. Wight, Cleghorn, Gibson, Brandis and Mason, Colonel Frith, Captain Macdonald, Cal. Cat. Ex.* 1862. *Roxb., Fl. Ind., Vol. I., p.* 575, *Thw., En. Pl. Zeyl.*, 201, *Mr. Jacob.*

STRYCHNOS POTATORUM, *L. Willde.*

Nirmali. ENG.	Katake. SANS.
Chilbinj-ka-jhar. DUK.	Injini-gass. SINGH.
Clearing nut tree. ENG.	Tettan cottay maram. TAM
Nirmali. HIND.	Chillaghinzalu chettu. TEL
Chil binj. "	Chilla chettu. "
Tettan parel maram. MALEAL.	Indupu " "
	Katakamu. "

The wood.

Induga wood ? ANGLO-TEL.	Induga karra. TEL.
Chilbinj-ki lakri. HIND.	

The tree.

Clearing nut tree. ENG.	Thetta maram. TAM.
Chillbinj. HIND.	Taitan " "
Nirmul. "	Chilla ginja chettu. TEL.
Nirmuli. "	Indapa chettu "
Nir malli. MAHR.	Kotoko of Ganjam and Goomsur.
Ingini gaha. SINGH.	

This tree grows in the drier, and especially the northern, parts of Ceylon. It is found in various parts of India and grows to a moderate and even large size, larger than the S. nux vomica and scarcer. It is found in Coimbatore and other parts of the Madras Presidency, on mountains and in woods of great extent; on the hills of the Satpoora range, near Arrawad and in the jungles of Doordi, on the Gutpurba river. The wood is hard and durable, and, though of small size, is used for several economic purposes. In Ganjam and Goomsur, its extreme height is 40 feet, circumference 4 feet, and height from the ground to the intersection of the first branch, 9 feet. In Ganjam and Goomsur, it is chiefly used for firewood, though bandy-wheels and ploughshares are occasionlly made of it. The seeds have the peculiar property of purifying muddy water, and are constantly used for that purpose by the natives of India who rub the inside of their lotas and brass pots with them. The fruit is used medicinally.—*Drs. Wight, Gibson and Cleghorn, Captain Macdonald, Thw., p.* 201, *Roxb., Fl. Ind., Vol. I, p.* 576.

STRYCHNOS SANCTI IGNATII. *Berg.*

Ignatia amara ?

St. Ignatius' bean tree. ENG.	Papita. HIND.

A branching tree, a native of the Philippine Islands and Cochin China, character of wood not known. Its seeds or beans are of the size of a large olive, and contain treble the quantity of strychnine of the nux vomica nut.—*Dr. O'Shaughnessy, Voigt.*

STYLOCORYNA WEBERA, *A. Rich.*

Webera corymbosa, *Willd., Roxb. Fl. Ind.*, i. 696.
Canthium corymbosum, *Pers. Rheede.*
Rondeletia asiatica, *Linn.*
Cupia corymbosa, *DC.*
Tarenna Zeylanica, *Gærtn.*
Polyozus ? maderaspatanus, *DC.*

Tarana. SINGH.	Bomma papata. TEL.
Kommi chettu. TEL.	Konda " "

The wood of this shrub or small tree is small, but hard and tough: is prettily marked, and much esteemed for helves. It is met with on the Godavery. Its leaves and fruit are used in medicine.—*Capt. Beddome, Roxb., Fl. Ind., II, p.* 533, *Voigt, p.* 377.

STYRAX BENZOIN, *Dryander.*

Husse-ul-jawi. ARAB.	Gum benjamin. ENG.
Benjamin. ENG.	Luban. HIND.
Benzoin. "	Husse luban. PERS.

This tree is a native of Sumatra, Siam and Java, and yields the gum benjamin of commerce: character of wood not known.—*Voigt*, 347.

SUVANDE, SINGH. A wood used in Ceylon for common house-building purposes. It grows in the western province of that island. A cubic foot weighs 56 lbs., and the wood is said to last 30 years.—*Mr. Mendis.*

SUMATRA. The Sumatra forests contain an inexhaustible store and endless variety of timber trees, many sorts of which are highly valuable and capable of being applied to ship-building and other important purposes. On the western coast, the general want of navigable rivers has materially hindered both the export and the employment of its timber; but those on the eastern side, particularly Siak, are more favorably situated.

Red bintangur. For masts and yards the wood preferred is the *red bintangur*, a species of Uvaria, which in all the maritime ports of India, has obtained the name of poon or puhn, from the Malayan word signifying tree in general; as puhn, upas, the poison tree, pubn kaya, a timber tree, &c.

Camphor wood, useful for capenters' purposes.

Juar, Ebony, called in Batavia "kayu arang," or charcoal wood, is found here in great plenty.

Kayu arau, the Casuarina littorea is often termed a bastard pine, and, as such, gave name to the Isle of Pines discovered by Captain Cook. By the Malays it is usually called kayu chamara, from the resemblance of its branches to the ornamental cow-tails of Upper India. It has been already remarked of this tree, the wood of which is not particularly useful, that it delights in a low sandy soil, and is ever the first that springs up from land relinquished by the sea.

Kayu gadis, a wood possessing the flavour and qualities of the sassafras, and used for the same purposes in medicine, but in the growth of the tree it resembles rather the British elm than the laurus, to which latter tribe the American sas-

[illegible] belongs. It is very common in the plains near Bencoolen.

Kayu pindis or *Kapini*, a species of Metrosideros, is named also *Kyau besi*, or iron-wood, on account of its extraordinary hardness, as it turns the edge of common tools.

Marbau, the Metrosideros Amboinesis, R. grows to a large size, and is used for beams both in ship and house-building, as well as for other purposes to which oak is applied in Europe.

Pinaga is valuable as crooked timber, and is used for frames and knees of ships, being also very durable. It frequently grows in the wash of the sea.

Rangas or *Rangi*, commonly supposed to be the manchineel of the West Indies, but perhaps only from the noxious quality of its juices, is the Arbor vernicis of Rumphius, and is particularly described in the Batav. Trans. Vol. V., under the name of Manga deleteria sylvestris, fructu parvo cordiformi.—*Marsden's History of Sumatra, p.* 162.

SUMSIHAR, HIND. A tree of Chota Nagpore. Hard timber.—*Cal. Cat. Ex.* 1862.

SUNNUN. The trunk of this Panjab tree to the first branch is 6 feet, and girth 2½ feet; wood in ripe trees of a dark bay, like the Sissoo, hard, veined, polishes well; used chiefly for cot posts and legs, also for combs, and in all small work; not liable to warp, nor subject to worms. Found in forests of slow growth; attains full size and becomes useful in 30 years.—*Lieut.-Colonel Lake, Commissioner Jhullundur Division.*

SUTSHER. A dark coloured wood, close grained, strong and heavy, grows from Sooree to Hasdiha in the Santhal jungles, but scarce. Furniture and posts are made from this wood. —*Cal. Engineers' Journal, July* 1860. (*Note.*—Is this name correct?)

SYMPLOCOS, a genus of plants, of which there are about thirty species in the south and east of Asia. Thwaites in his Enumeratio Plantarum Zeylanicum mentions fifteen Ceylon species.

SYMPLOCOS, *Species.*

Kam-tha-pho-gee. BURM.

A timber of Tavoy, used in boat building.

SYMPLOCOS CRATÆGIODES, *Don.*

Lodar PANJAB.
Lu. ,,
Lodh the Bark.
Loj. PANJAB.

A small tree of the Panjab Himalaya, growing up to 3,000 and 7,000 feet. Its wood is not specially valued.—*Dr. J. L. Stewart, p.* 138.

SYMPLOCOS PANICULATA.

Lodh.
Lodhar.

The wood of this Panjab tree is moderately hard, and used for posts. The bark is collected for sale as a dye.—*Mr. Powell.*

SYMPLOCOS RACEMOSA, *Roxb. Fl. Ind. II. p.* 539.

Lodh. BENG.
Lodh. HIND.
Hoora. MAHR.
Savura lodhra. SANS.
Lodduga. TEL.
Erra lodduga. ,,

This small tree, from ten to twelve feet high, and with a trunk about 20 inches in circumference, is a native of Nepal and Kumaon and of Burdwan and Midnapore in Bengal. It grows also in the Kotah jungles, but, in the Bombay Presidency, it is found only in the jungles of the highest ghats. Its wood is yellowish, hard, strong and compact, and might be used for cabinet as well as for other purposes, and for turnery. The bark of the root is sold at 4 seers the rupee, and is used in Rajputanah, for dyeing red. It is also used in medicine, being considered heating and promotive of the secretions. It is used also in the mesalihs for animals. The bark furnishes one of the red powders, known as "abir," scattered by Hindus in the festival of the hoolee.—*Drs. Roxb., Fl. Ind., II, p.* 539, *Irvine, Gibson, Voigt, Mr. R. Thompson.*

SYMPLOCOS SPICATA, *Roxb.*, ii, 541.

Bombi. SINGH.

A tree of Assam and the Khassya hills, of Ceylon and the south of the Peninsula; with white flowers. Timber used in house-building.—*Roxb.*, ii., 541, *Major Beddome.*

SYNDESMIS TAVOYANA, *Wallich.*

Ka-tha. BURM.
Tavoy red wood. ENG.
Mergui red wood. ENG.
,,

A very large tree of British Burmah. The wood makes handsome furniture, and is used for buildings, boxes, &c., and, in Tavoy, for similar purposes to those that the gum kino wood is applied at Moulmein. It is, occasionally, a beautifully variegated wood, well adapted for furniture and ornamental purposes. It contains a dye, and is in great abundance in the islands on the coast and near Moulmein. When the wood is steeped in ferruginous mud, it turns jet black and looks like ebony. The large cylindrical knobs, one or two inches in diameter, so often noticed in the ears of Karen women at Tavoy are made of this wood after the colour has been changed.—*Captain Dance, Drs. Mason and Wallich.*

SYRINGA EMODI, *Wall.*

Ban-phunt. PANJ.
Ban dakhur. ,,
Juari. ,,
Shafri. ,,
Dudla. ,,
Lolti. ,,
Shaffar of Kanawar.
Karmar. PANJ.
Ban-chir. ,,
Chimu. ,,
Rung chul of Kunawar.

This shrub grows at 7,000 to 11,000 feet in the Panjab Himalaya, and at 9,000 feet near the Safed Koh. Its wood is white and close-grained and carves well.—*Dr. J. L. Stewart, p.* 140.

SYZYGIUM, a tropical genus of plants, all the species of which are now referred to other genera, particularly Eugenia, and notices of E. acris ; alternifolia ; amœna ; bracteata ; caryophyllifolia ; caryophyllata ; cerasoides ; jambolana ; jambos ; laurina ; malaccensis and obtusifolia, will be found under these names, but, particular attention is directed to the remarks against E. jambolana. And, as Dr. Wight, in Icones, gives Syzygium carophyllaceum ; densiflorum ; jambolanum ; lanceolatum ; nervosum ; oblalum ; rubicundum ; rugosum ; salicifolium and Zeylanicum, it will be understood how greatly this genus has been changed. Mr. Thwaites notices Zyzygium assimile, Gardneri, micranthum, rotundifolia ; sclerophyllum ; spathulatum and S. umbrosum, all growing in the central provinces of Ceylon, at elevations of from 2,000 to 8,000 feet. S. oliganthum, *Thw.*, a small tree of the Ambagamowa district, at an elevation of 3,000 to 5,000 feet. Z. jambolanum, will be found noticed under its synonym E. jambolana (and Mr. Thwaites gives as its synonyms, *Syzygium caryophyllifolium*, DC. E. (S.) caryophyllifolia, [E. (S.) jambolana ? var. microcarpa], Wight, t. 553. E. caryophyllifolia, Lam. Roxb. ; Fl. Ind., II. p. 486. Calyptranthes cumini, Moon's Cat. p. 39—c. p. 1584.) It is the Madang-gass, SINGH., is common in Ceylon, up to an elevation of 3,000 feet. Mr. Thwaites gives *Syzygium polyanthum*, ENG. (S. polyantha, Wight, Ill. ii, p. 17 ; Ic. t. 543.) And S. balsameum, Wall., and Wight, Calypt. caryophyllifolia, Moon's Cat. p. 39—c. p. 2081, the Batta domba-gass of the Singhalese, is a large tree common in Ceylon up to an elevation of 3,000 feet. And, *Syzygium sylvestre*, ENG. (S.) sylvestris, W. Ic. t. 532. Calyptranthes jambolana, Moon's Cat. p. 39—c. p. 2862, the Aloobo-gass of the Singhalese, as a large tree, common in Ceylon, up to an elevation of 3,000 feet. The woods of several of these trees are employed for economic purposes.—*Wight, Icon., Voigt, Thw. En. Pl. Zeyl., p.* 116.

SYZYGIUM JAMBOLANUM, *DC.*

Jamun. Jamu. Jammu. HIND.
Rukan or Rukhan of Panjab.
Ruknu ,,
PhullindahJamoon of Kumaon
Katammal of Kangra.
Sumra (the wild tree) of Hushyarpur.

Grows in Kumaon in low flat localities. In the Panjab it grows to 70 or 80 feet high, with 8 or 9 to 15 feet in girth, and is a good shady avenue tree. The heart wood is reddish coloured, heavy, hard and strong, and durable, is not attacked by worms, but is apt to warp and does not last well in the air. It is made into planks, is a favorite for well-work, and is used also for sugar-mills and agricultural implements.—*Dr. J. L. Stewart, p.* 94, *Mr. R. Thompson.*

SYZYGIUM LATERIFOLIUM.

Jamoon.

A small tree grows in dry situations in Kumaon, timber hard, heavy and durable, and of a good grain.—*Mr. Thompson.*

T

TABERNÆMONTANA DICHOTOMA, *Roxb.*

T. citrifolia, *Gibson.*

Nagin koora. CAN.
Duvi kaduru. SING.
Pala. TAM.

Grows in Ceylon and Malabar ; common on the hills near and below the ghats of Canara and Sunda. Wood white, but tough and strong. Never large.—*Roxb.* ii, 21, *Dr. Gibson.*

TABOOT ? A tree of Akyab, wood used for making banghies and other fine work. It grows to a moderate size, but is not very plentiful.—*Cal. Cat. Ex.* 1862.

TAG-NYENG. In Tavoy, a useful furniture wood.—*Mr. Blundell.*

TAHITI yields timber from the Acacia myriadena, Artocarpus incisa, Casuarina equisetifolia, Cepanthes mara, and Rhus apape.

TAIA-BOUK-BHA ? A plentiful tree of Akyab. It is a small wood, and is used for firewood.—*Cal. Cat. Ex.* 1862.

TA KEEP-NEE. In Tavoy, a very strong, close-grained, heavy, light-coloured, wood.—*Mr. Blundell.*

TA-KOUK THA, BURM. OR YAY MINE, BURM. A tree of Amherst, Tavoy and Mergui, of maximum girth ½ cubit and maximum length 7 feet. Abundant all over the provinces. When seasoned it floats in water. It is a durable wood, likely to make good helves or to be useful in turning. Too small in size, however, to be recommended.—*Captain Dance.*

TALAZ, BURM. ? A tree of Akyab. It is plentiful and is used for oars and banghies, and in house-building.—*Cal. Cat. Ex.* 1862.

TALLE TANGA, the Malayala and Tamil name of a Malabar and Canara tree, which grows to about two feet in diameter, and thirty feet high. It is the tree that produces the jungle almonds, on which monkeys and other forest animals feed. The natives cut this wood into boards for boat and house-building, they also make it into canoes, which are said to be durable. The boats are sewed together by coir yarns.—*Edye Forests of Malabar and Canara.*

TAMARINDUS INDICA, *Linn.; Roxb.; W. & A.; DC.* THE TAMARIND TREE.

Tamarindus occidentalis, *Gærtn.*
,, officinalis, *Hooker.*

Tamr-i-hindi. AR??
Tintori. BENG.
Ma-gyi. BURM.
Huli shena. CAN.
Oonara mara. ,,
Hoonsay? ,,
Tamarind-tree. ENG.
Amli ka jhar. HIND.
Cheetz. MAHR.
Asam. MALAY.
Kamal ,,
Balam puli. MALEAL.
Darakht tamr-i-hindi. PER.
Sigembela. SINGH.
Seiam-bala. ,,
Pulia maram. TAM.
Chinta chettu.

The fruit.

Amli.? AR. GUZ. HIND.
Imli. CASH. DUK.
Umbuli. ,,
Cay-me. COCH.-CHIN.
Tamarind. ENG.
Tamarins. FR.
Tamarinden. GER.
Tamarindo. IT. SP.
Tamarindus. LAT.
Asam. MALAY.
Jawa. ,,
Kranji. MALAY.
Kamal. ,,
Neghka. MALEAL.
Tamr-i-hindi. PERS.
Amlika. SANS.
Tintili. ,,
Maha-siambala. SINGH.
Puli pallam. TAM.
Chinta pandu. TEL.
Demer-hindi. TURK.

This is a very handsome tree, of a slow growth, but attains a great size. It is not a tree common in forests, but is met with in gardens, near old temples, in groves or topes, and along roads where it has been planted. It is a graceful avenue tree and its fruit is in great request. The wood is hard, dark coloured, durable, and often finely veined, and the heart wood of old trees is dark coloured, resembling ebony. The tree is apt to be hollow in the centre, which prevents large slabs being obtained. The wood is used in the manufacture of sugar and oil mills, naves of wheels, mallets, rice-pounders, and for furniture and building purposes, but carpenters are very unwilling to work it up, on account of the great damage it causes to the best tempered tools. It is valuable for brick and tile burning. Mr. Edye says there are two sorts of the tamarind, the light and the dark. The trees grow to about seven or eight feet in diameter at the butt, while that of the body of the tree is about five feet. This part is seldom more than ten feet long when it branches out into curves of various dimensions. It is considered valuable from the quantity of fruit it produces, which is used medicinally. The fruit is used in cookery. These trees are cultivated in gardens, and spread their branches to a great extent. The timber is remarkably heavy and hard, much like Lignum-vitæ, and is used generally for shivers in blocks, and such purposes.—*Edye Forests of Malabar and Canara, Drs. Wight, Mason, Cleghorn, Gibson and Stewart, Mr. Mendis.* (*Note*—Mr. Edye, in saying that there are two sorts of tamarind, the light and the dark, possibly alludes to the West Indian red and East Indian white varieties; several large trees of the former with red fruit, grow in the south of India, and I largely distributed the seeds through the Madras Board of Revenue but with little or no success.)

TAMARIX, the Tamarisk. Of this genus, the more common species are the T. gallica, *Linn.* the "*jhao*" of northern India, which grows on the Coromandel coast, on the banks of the Jumna and Ganges, on the banks of the Indus, in Cutch and Sind, where it is commonly used for firewood :—Also T. dioeca, *Roxb.*, a shrub of the Sunderbuns and found in the beds of the Konkun and Dekhan rivers: it is the "Lal jhao" of India. Dr. Royle remarks that bitterness and astringency are the properties ascribed to the Tamariscineæ and hence the occasional employment of the European species as a tonic, and in Denmark as a substitute for hop in making beer. In India, also, the twigs of T. Indica and dioeca, are considered astringent, but the plants are more valued on account of the galls which are formed on these and on T. Furas, as on T. orientalis in Egypt, and which, being highly astringent, are now, as in former times, used in medicine and dyeing, those formed on T. Furas, are called "Sumrut-ool-aul" or "Choteemue"; and of the jhao, "Sumrut-ool-toorfa" or "buree-mue," they are chiefly imported from Mooltan, but he had found the Furas in Delhi. The ashes of T. gallica and Africana, when growing near the sea, contain a large proportion of sulphate of soda, so that they may be profitably burnt to obtain that salt, and its abundance explains the utility of some of these plants as diuretics. The T. Indica grows to the size of a middling-sized tree, with a trunk the thickness of a man's body. A product very different from any of these products, is the manna produced on a species of tamarisk. This has been ascertained by Ehrenberg to be produced by the puncture of Coccus maniparus, on a variety of T. gallica, growing on Mount Sinai. This manna has long been known by the name of Arabian, to distinguish it from the Persian, manna, the produce of Alhagi maurorum, the toorunjbeen (v. p. 194,) of Arabian authors. This is called Guzunjbeen, from Guz or Kuz, one of the names of the T. gallica tamarisk.—*Royle, Ill. Him. Bot., p.* 214, *Roxb. Vol. II, p.* 101.

TAMARIX DIOECA, *Roxb., J. L. Stewart.*

Lal-jhao. HIND.
Jhau. PANJ.
Pilchi. ,,
Rukh. ,,
Koan. ,,
Lei. PANJ.
Lai. ,,
Kach-lai. ,,
Ghazlai. ,,
Rghelta. LAD.

T. dioeca grows in upper India, near the Dekhan and Concan rivers, is common on the banks of the rivers of the Panjab, but is usually small and used as fuel.—*Dr. J. L. Stewart.*

TAMARIX GALLICA, *Linn.*

Var. β. T. Indica, *Ehrenb.*
T. Indica, *Willde.*
T. epacroides, *Linn.*

Jhau. Panj.
Pilchi. „
Rukh. „
Koan. „
Lai ; lainya. Panj.
Kachlei. „
Ghazlei. „
Rgelta. Lad.

T. gallica (T. Indica *Roxb.*) is found at 10,600 feet on the Shayok in Ladak ; it reaches 30 feet in height and 3 feet in girth. Its wood is often very red, is coarse-grained and used for Persian wheels, and in Ladak as handles, for the polo or hockey sticks, baskets are made of the twigs.—*Dr. J. L. Stewart p.* 91.

TAMARIX ORIENTALIS, *L.*

Khwa Eng.
Ghwa. Pashtu.
Ghuz. „
Faras. Panj.
Farwa. „
Parwan. „
Ukhan. Panj.
Ujhan. „
Rukh. „
Kharlei. „
Narlei. „

Galls.
Mai-bari. | Mai-choti

Manna.
Gazanjbin. | Misri lei.

Flowers.
Bur.

Common from Delhi along the Panjab plains, up as far as Peshawar. Some trees grow with their branches close to the stem, and the tree is often mistaken by Europeans for a fir. It grows rapidly and decays rapidly being old at 20 years, its height is up to 60 feet with 12 feet girth, the timber weighs lbs. 90 when green, and lbs. 60 when dry. It is coarse-grained and used for Persian wheels, ploughs, small rafters. It emits an offensive odour when burnt. It is used for charcoal.—*Dr. J. L. Stewart, p.* 92, *Mr. Powell.*

TAMBAGUM. Tam. A Travancore wood of a brown colour, specific gravity 0·910, 5 feet in circumference, a very strong wood, used for houses, blocks, &c.—*Col. Frith.*

TAMBOGUM in Tamil, and Vanponga in Malayala. This Malabar and Canara tree is remarkably heavy and close-grained, and may be considered very similar to the timber now imported into the dock yards from Africa, named African teak, No. I. It grows from thirty to fifty feet long, and about thirty inches in diameter, and is used by the natives where strength and durability are required, and weight is of no consideration. It produces a fruit or berry, which the natives reduce to meal, with which they make cakes, curry, &c. : the berry is much like coffee in shape and size.—*Edye, Forests of Malabar and Canara.* (*Note.*—Are the Tambagum of Colonel Frith and the Tambagum of Mr. Edye identical ? Are they Shorea tambuggaia ?)

TAMPINNIS, A fruit tree of Penang, of a light red colour used for ornamental furniture, billiard cues, &c.—*Colonel Frith.*

TANGNET-NA, Burm. A Tavoy wood.

TANI in Tamil, Jellam in Malayala, which means water-wood. This tree grows to about two feet in diameter, and forty feet high. It is remarkably soft and porous, and contains a great quantity of water. When it is felled it is of little use ; and is considered as one of the inferior kinds of jungle wood.—*Edye, Forests of Malabar and Canara.*

TAN-LABET ? In Amherst, a heavy, white timber, employed for house-posts and other common purposes. It is not liable to injury from insects.—*Cat. Ex.* 1851.

TANNA, the Tamil name of a Malabar and Canara tree, which is hard and heavy. It is used by the natives in house-work, and for implements of agriculture when it can be procured, but, it is very scarce.—*Edye, Forests of Malabar and Canara.*

TANTHEYA, Burm. A Tavoy wood.

TAREE MARA, Can. Yehela, Mahr. Terminalia bellerica. In Canara and Sunda, common both above and below, and is one of the greatest trees in the forest. Wood serviceable for houses but not first rate ; used also for plank.—*Dr. Gibson.*

TAUP-SHA. An Amherst wood, employed for house-posts, and would answer for common carpentry, but it is liable to split ; the bark is supposed to be medicinal.—*Cat. Ex.* 1851.

TAVOY WOODS. Our knowledge of the woods of this province is derived from two lists of specimens, one by Dr. Wallich and one by Mr. Blundell, which were sent to the Exhibition of 1851 ; and also from the extended notices of the timbers of this province, which Captain Dance furnished. The names of Captain Dance's contributions, will be found under the head of Amherst, Tavoy and Mergui. And his detailed descriptions alphabetically. The names in the lists of Dr. Wallich and Mr. Blundell are as under : and notices will be found in the alphabetical arrangement.

Trees and woods of Tavoy by Dr. Wallich.

Acacia : Popeeah, *Burm.*
Acacia : Paingadoo. *Burm.*
Anacardium. Thubbamboo, *Burm.*
Artocarpus. Thoucnben, *Burm.*
Artocarpus, *sp. Burm.*
Artocarpus : Pynyathe or tannabeng, *Burm.*
Bignonia, Thathee, *Burm.*
Bignonia : (?) Thuggainee, *Burm.*

CSL

Bignonia : Iahbha, Burm.
Calophyllum : Turra-phee, *Burm.*
Carapa : Tail[illegible]on, *Burm.*
Careya : Kaga, *Burm.*
Castanea Martabanica, Norne or zitha, *Burm.*
Cerbera manghas, Kulloona, *Burm.*
Dillenia Zimboon, *Burm.*
Dipterocarpus grandiflora, Ain or aintha, *Burm.*
Dipterocarpus grandiflora? Kunnean phin, ? *Burm.*
Euphorbiaceæ, Yamula, *Burm.*
Eurya, Thaun, *Burm.*
Excœcaria, ? Thurrotha, *Burm.*
Ficus, Thubboo, *Burm.*
Ficus, Thuppan, *Burm.*
Garcinia Pulloua, *Burm.*
Grewia, Miaya, *Burm.*
Heritiera fomes, Kunnazoo, *Burm.*
Hibiscus macrophyllus.
Hibiscus macrophyllus. (?)
Hopeafloribunda, Thantheya, *Burm.*
Lagerstrœmia, Kuenmounee or puma, *Burm.*
Laurus, Kullowa or kurrowa, *Burm.*
Laurus, Panatha, *Burm.*
Laurus, Maythen, *Burm.*
Laurus, Keemna, *Burm.*
Laurus, Thuggoo, *Burm.*
Laurus, Thitya, *Burm.*
Laurus, Kayzai, *Burm.*
Mimusops, Thubbae, *Burm.*
Mimusops elengi.
Murraya, Maika, *Burm.*
Myristica, Thounsanga, *Burm.*
Myristica, Koathoe or Kunneen, *Burm.*
Osyris peltata, Phaoun, *Burm.*
Pierardia, (?) Kunna or Kuzzo, *Burm.*
Pinus Dammara, *Burm.*
Pterocarpus, (?) Puddow, *Burm.*
Rettlera, Mimasko, *Burm.*
Rottlera, Keoun lae, *Burm.*
Sandoricum, Thittoo, *Burm*
Soaptea, ? Palæpean, *Burm.*
Sonneratia, (?) Thaumma, *Burm.*
Sterculia, (?) Kununu, *Burm.*
Sterculia, Thikadooo, *Burm*
Symplocos, (?) Kain-thaphogee, *Burm.*
Syndesmis Tavoyana, Katha, *Burm.*
Syndesmis, Kunnun keunka Kunnun keunla, *Burm.*
Terminalia, Thuphanga, *Burm.*
Ternstrœmia, Puzzeen zwa, *Burm.*
Uvaria, Thubbor, *Burm.*
Wrightia antidysenterica Lathou, *Burm.*
Xylocarpus, Keanuan *Burm.*
Zizyphus, Zeethee, *Burm.*

Vernacular names.

Ahnaun, *Burm.*
Bah-mah-thoa, *Burm.*
Con-moo, *Burm.*
Kaantha, *Burm.*
Kaungo kurra.
Keahnaun, *Burm.*
Kuddoot alaim, *Burm.*
Kuddoot-nu, *Burm.*
Kummi, *Burm.*
Mainaban, *Burm.*
May klin, *Burm.*
May-maka, *Burm.*
May-rang, *Burm.*
May-tobek, *Burm.*
Megeone, *Burm.*
Penlay-peen, *Burm.*
Pienmaline, *Burm.*
Pienmah pue, *Burm.*
Tantheya, *Burm.*
Tangnet-na, *Burm.*
Teatha, *Burm.*
Thauga-et thittoo, *Burm.*
Than-baunpo, *Burm.*
Thau baun thau-lay, *Burm.*
Theyah, *Burm.*
Thounmynga, *Burm.*
Thymbro, *Burm.*
Town pine, *burm.*

Mr. Blundell's list.

Annan.
Bep-than.
Bep-won.
Bhan bhway.
Bha-ta-ka.
Daup-yan.
Eng-beng.
Cedrela ? Kad-wot-nu, *Burm.*
Kanna-tao.
Ka nyeng kyaung khyay.
Ka-nyeng pyan.
Katso Like toon.
Kaung-thmoo ye-pay.
Kengthep-guyung ywopt.
Kengthep-pheoot-kyay.
Khamoung-nee.
Khamoung-pyiou.
Kharaway-nu.
Kouk-ko.
Kyay-taay-gyu-khy-ay.
Kyay-taay-bayoun.
Kyep-yo.
Kywon-bo.
Kywon-ma.
Lienman.
Mala-ko.
Ma-yam.
Mee-kyaung-kyay.
Meep-thua-ban.
Miaup-bout.
Mya-kamaun.
Myeng-ta-bep.
Ngoo-beng.
Noalee-lyeng.
Pan-loun.
Pantheet-ya.
Patseng-taway.
Patseng-ngo.
Peng-lay-byun.
Peng-lay-oun.
Peng-lay-kaboay.
Mimosa, Pee-daup, *Burm.*
Artocarpus, Pinnay, *Burm.*
Pyaung pyiou.
Pyeng-khado.
Tag-nyeng.
Ta-keep-nee.
Tha-bhan.
Tha-byay-nee.
Tha-byoo.
Theet-ta-gyee.
Theet-ya-ban.
Theet-ya-nee.
Theet-ya-pyiou.
Thiem.
Thingan-kyaup.
Thmeng-ba.
Thmeny-tshout.
Toung-bhaut.
Toung-bhien.
Toung-byeng.
Toung-byion.
Toung-kha-ray.
Tseng byiou.
Tsoay-dan.
Wonthay-khyay.
Yow-ma-lay.
Zoo-lat.
—*Cat. Ex.* 1851.

TAXUS BACCATA, *Linn.*, THE YEW.

Birni tung, tunni, Hazara.
Badhar, sarrap of Hazara.
Kautu.
Rakhal of Chamba, Beas.
Sangal, postal of Kashmir.
Yamdal of Kanawar.

This tree grows in the western Himalaya beyond the Indus and on the Safed Koh, at 5,000 to 10,000 feet. It does not grow higher than 40 or 50 feet, with 7, 8, to 18 feet of girth. A few trees were observed at Kulu. It is elastic, is used for native bed-steads, bows, jampan poles, upholstery and clogs. The wood of old trees is reddish, polishes well, and seems suited for turnery and work.—*Dr. J. L. Stewart, p.* 227, *Mr. Powell, H. B.*

TAYET KHYEE. BURM. This timber tree, of maximum girth 2 cubits and maximum length 15 feet, is abundant all over the Tenasserim provinces. When seasoned it floats in water. It yields a pretty wood in grain, but one which when it dies rots readily. It is of no durability.—*Captain Dance.*

TAY-THA. BURM. A timber tree of Amherst, Tavoy and Mergui, maximum girth 3 cubits and maximum length 15 feet. Scarce in Amherst, but abundant towards Tavoy. Found inland also along the sea coast all over the provinces. When seasoned it floats in water. It is subject to the dry rot when seasoned, is a useless wood and not recommended.—*Captain Dance.*

TAY YO THA. ? A timber tree of Amherst, Tavoy and Mergui, of maximum girth 2 cubits and maximum length 18 feet. It is very abundant on the sea coast and adjacent islands of these provinces. When seasoned it floats in water. It is used for oars and masts of boats. When this wood is cut, a very acrid caustic juice or sap flies from it which will destroy sight, if it touch the eye ; or, if it fall on the face, it raises blisters. A wood dangerous to work, and not durable.—*Captain Dance.*

TECOMA STANS. A small tree or ornamental garden shrub, of the West Indies, has been introduced into India.

TECOMA UNDULATA, *G. Don.*

Bignonia undulata, *Roxb.*

Rohira, PANJ.
Lahura. ,,
Luar. ,,
Regdawan, PASHTU, PANJ.
Reodan ,,
Rebdun. ,,

This small stiff looking tree grows in the arid tracts from Dehli to the west of the Indus rising to 40 feet with a girth of 5 to 8 feet. It has orange coloured blossoms. Its wood is small but good, hard close grained and strong.

but scarce. It is used for charpais, spinning wheels and ploughs.—*Dr. J. L. Stewart, p.* 149.

TECTONA GRANDIS. The Teak tree.

Saygun.	BENG.	Saya.	MAHR.
Kuyon.	BURM.	Jati.	MALAY.
Shaldoona of Jubbulpore.??		Tek maram.	TAM.
Sagwan.	HIND.	Teku chettu.	TEL.

Localities. For the purposes of the public service, this majestic forest tree is perhaps the most largely used of any of the woods of south-eastern Asia and merits, therefore, a notice of some length. It is found in Bundelcund, on the Aravalli and Satpoora and on the banks of the Taptee river. It grows as a majestic forest tree on the western side of India, from Nassik, N. W. of Bombay, southwards to Severndroog ; also in the forest west of Vingorla, near Sawuntwarie : in the forest between Dharwar, Sunda and Sedashegur and in small patches above the ghats, in Canara, Malabar, Cochin, Travancore and Coimbatore, and in the Anamullai. In Ceylon, the Dutch largely planted teak, which has attained considerable size : a small quantity occurs in the Nalla Malai mountains between Nellore and Cuddapah. North of this, it is known in the Nagpore and the Hyderabad territories, on the Godavery and its feeders, viz., east of Chanda, on the left bank of the Paen Gunga and north of the Indrawatti river in 20° N. L. also on the 18° N. L. close to the right bank of the Godavery, east of Warungul and, further east, on the right bank of the Sebbur river. In Burmah and the Tenasserim provinces, also, at the forks of the Salwen river, and west of Moulmein between the Martaban river and the Menam, and nearly as far south as Tavoy, teak forests occur of great value. The Malay peninsula south of Tavoy, has no teak, but further south and east it reappears in Siam and in the mountainous parts of Sumatra, Celebes, Sumbawa and Java. Between Japara and Sourabaya, several extensive teak forests occur, which are of vast importance to the island : as the timber is well adapted to ship-building, being very durable and easily worked. Indeed, there is no other kind of wood in the Archipelago, which will endure so well, in the water. But Java is the only island in the Archipelago possessing teak forests which are, at present available to any extent for the purpose of ship-building ; for, though teak is found in Sumatra, Celebes and Sumbawa, the forests in these islands, are so far distant from the sea, that the expense of land carriage prevents the natives deriving any great advantages from their export.—(*Mr. Earl, p.* 44 *to* 45.)

Bombay west coast. Dr. Gibson's Report, 1849 to 1856, p. 166, tells us that in Ankola talooka of the Bombay Presidency, teak extends over mountain lands in thirty-two villages; and in Kownaee over forty villages, including those of the mahal Trimbuk. In the same Reports (pages 5 and 6,) he tells us that from many destructive processes, such as burning, hacking, &c., many Bombay provinces formerly abounding in Teak-wood trees are now bare. They are still, however, found at Gond, Barnunbulee, Mawlinga, Berchee, &c., above the ghats, and in other parts of Yellapore talook : a few trees in Honore, north of the foot of Hosul-Mukki ghat ; and about 18,000 small trees were estimated in Ankolah and Honawur divisions. These teak forests continued to be worked for the naval department, and afforded a few logs of upwards of eight khundies, and having a length of above forty feet. These are technically called superiors and are calculated for kelsons, &c., of ships of the line. In his Report, 1857 to 1860, p. 45, Dr. Gibson estimated the Teak trees fit to be cut, without reference to those below three candies each, and available, as under :

	Trees.	
I.—For Sedashegur.		
A—From Tareemullapoor up to Shidungoor, about....	2,000	
B—Goond Teak, where there will be scarcely any rejected wood..........	40,000	
		42,000
II.—For Gungawullee.		
A—As far as Coddlooguddy.	1,000	
B—From Coddlooguddy till Mogore and Soondat......	1,000	
		2,000
III.—For Tuddry, about................		2,000
IV.—For Honore..........................		2,000
Total number of teak trees........		48,000

And, taking the trees at the average of only three candies each, he estimated that there could be 1,44,000 candies cutting of these yearly, so that they could supply Bombay with 2,430 candies, and the supply would last for 55 years more.

Malabar coast. Dr. Cleghorn tells us (*Report* 1858, *p.* 3,) that along the whole length of the Malabar coast from Goa to Cochin, there is now very little teakwood in a ripe state on Government land below the ghats, and there are only three localities above the ghats, viz., the Anamullai forests in Coimbatore ; Wynaad and Hegga-devincottah ; and the Gund plateau, North Canara, near Dandellie where he found Teak in abundance and of good size. The chief reserve remaining is a forest in the Gund plateau. Indeed, Teak scantling of large size is becoming more and more scarce along the West coast, and in Malabar first class logs are not easily procurable. That of Canara is even of smaller size; and it is everywhere found too expensive for ordinary railway purposes. But, it is not teak only that the Canara forests produces; for, the following timbers were supplied from these forests in the year 1859:—

To what department supplied.	Teak.					Blackwood.					Junglewood.					Total.				
	Logs.	Candies.	Qrs.	G.	T.	Logs.	Candies.	Qrs.	G.	T.	Logs.	Candies.	Qrs.	G.	T.	Logs.	Candies.	Qrs.	G.	T.
Bombay Dockyard.	409	904	2	4	10	12	45	2	4	10	...	...	...	...	...	421	950	1	4	...
Hyderabad Sinde Engineer. ...	37	118	2	2	10	...	...	...	...	...	...	...	...	...	...	37	118	2	2	10
Darwar Engineer.	187	344	2	1	5	...	...	...	...	...	538	842	...	4	...	725	1,186	3	...	5
Belgaum do...	88	146	1	1	0	...	...	...	...	...	375	160	...	3	17	463	306	1	4	17
Lingasoogoor do...	108	188	3	2	17	...	...	...	...	...	16	23	...	1	1	119	211	3	3	18
Darwar factory. ...	...	...	...	...	...	...	...	...	...	...	30	43	3	4	15	30	43	3	3	15
Belgaum barrack.	215	417	1	2	6	7	6	3	1	3	531	907	3	3	11	753	1,332	...	4	...
Taddy workshop..	100	38	2	3	13	...	...	...	...	...	...	...	...	...	...	100	38	2	2	...
Edduljee Government Contractor	9	38	1	4	19	...	...	...	...	...	25	21	2	...	...	34	40	...	...	...

Teak plantations have however been formed in several places, but the most important are those on the Nelambur river in the Ernaad taluk of Malabar. Dr. Gibson tells us (*Report*, 1848-56, *p.* 4) that about four hundred thousand teak trees were said to have been planted there by Mr. Conolly and they were then of ages varying from sixteen to four years. Advantage had been taken of the proximity of the Nelumbur river with a view to future operations. The locality is about forty-eight miles inland from Calicut, near to the short or bridle-road to the Neilgherry hills. The success which had attended the measure appeared to Dr. Gibson to be complete. The trees had run up with a straight and clear stem, and some had reached the height of thirty-five feet, with a circumference of from eighteen to twenty-four inches below. They were thickly planted, in order to secure a straight stem and for mutual protection from the winds, but in December 1861, more than 50,000 saplings were marked and out, to relieve the plantations, many of which were suffering severely from overcrowding.

The *Wynaad and Heggadevincottah forests*, on the borders of Mysore and Malabar, Dr. Cleghorn says (*Report*, 1858, *p.* 4), are of great value. They are about 40 miles long by 30 broad, and were estimated by him as able to supply 2,000 bandy loads annually (or say 40,000 cubit feet of teak) without apparently injuring the resources of the forest. There being no cultivation and a very scanty population, and the timber consequently not being required for local purposes, he urged that this forest should be reserved. From the situation and natural slope of the country, the timber must be carried eastward, it would be extremely valuable for Bangalore; and he thought it probable that this forest timber would meet the increasing demand at Ootacamund: but, no means of transport exists by which the crooks and other naval timber found in the forest could be conveyed to the coast, where they would be extremely valuable. The expense of carriage by the usual route to Mysore and Manantoddy and down the Perriah Ghat at Tellicherry being altogether prohibitory. The average price of teak at the quarterly auctions held at Mysore had been almost exactly the same as at Anamallai, viz., about one rupee per cubic foot.

Wynaad. The teak forests in Wynaad, says Major Morgan, lie along the Mysore frontier, from Mudumallai in the south to the confines of Coorg in the north, a distance of about forty miles. The belt of teak, on an average, is about six miles in breadth. But, this belt also contains an abundance of very fine blackwood, honah and muttee. The central portion is the broadest and richest in teak, it grows there straight, and to a good height, and contains fully fifty good teak trees to the acre. The northern part of the belt from Bowally to Coorg is narrow, but is also very rich in fine teak. In the days of Hyder and Tippoo, these forests were worked to a great extent: There are good tract roads and outlets to the eastward, and timber is easily floated down the Cubbany river. The Wynaad teak forests are of importance, as Wynaad will have outlets towards the west to the sea coast.

In 1855, the price of teak at Mysore was from [illegible] to 8 annas a cubic foot, which gave the wood merchants, who worked the forests as they chose, not less than 25 per cent. profit, and, if taken to Bangalore, fifty per cent. more. The Mysore Government, some years ago, stopped the system of "Gooty Kanum," or stump fee, and worked their forests by their own servants, and then obtained at least one rupee per cubic foot profit. (*Rep. Con. For.* 1861-62, *p.* 21.) The price of teak at Mysore, in consequence of that Government taking the working of the forests into its own hands, considerably increased. During three quarterly sales at Mysore in 1861-62, for teak, 20 feet long 12 × 2; 10 feet long 21 × 21, and 15 feet long 18 × 10, cut in the forests which adjoin those of Wynaad, the receipts per foot of first, second, third, and fourth class, by auction, quarterly, had been on an average as follows:—

August 1861	at Rs.	1	9	3½	per cubic foot
Dec. 1861	at ,,	1	12	7	do.
March 1862	at ,,	1	6	4	do.

The teak forests of Mysore are contained in the eastern Umshoms or parishes of Moonenaad, Ganapatty vattam, Elloornaad, Poolputty dasum of Koopatode. The following is a list of the teak forests in the belt from Mooroogal or Moogoodoo in the north, on the confines of Coorg, to Tippoo Caudoo in the south, on the high road to the Neilgherry hills.

Iyapenpara Kukary, possessing teak in abundance: claimed by the Tiruelly temple.

Kooteray Cotta, possessing teak in abundance: Government property.

Masaul, possessing teak, but young. This forest having been exhausted of prime teak: Government property.

Susyvile, Hoolhully, Paubray, Kaper and Poolpully, commonly called the Veddykynaad, possessing teak in abundance, claimed by Poolpully temple.

Koorcheadoo, Kallymallay, Mungigal, Toromungal, Hurrygoongo and Echecoon, commonly called the Veddykynaad escheat, possessing teak in abundance, Government property escheat.

Edditoracottah, Kalamungal and Bene, possessing teak in abundance, but not easily to be got at, Government property escheat.

Nardimallay, Tippoocaudoo, and Caroor, possessing teak in abundance, easily worked, Government property escheat.

Moodoomallai, possessing teak in abundance, teak nearly worked out by Government who obtained it on lease, claimed by the Nellumbore rajah, but the Umshom is an escheat.—*Major Morgan's Report*, 1861-62, *p.* 23.

Cuddapah, Little is known of the small quantity available, in the *Nalla mallai*, on the north-east border of the Cuddapah district.

Godavery. Captain Beddome's opinion was unfavourable to the existence of a large quantity of teak within the limits of British territories on the Godavery: but, Dr. Cleghorn thought that the officials in the Nizam's country and those engaged in the timber trade had been unwilling to lead Captain Beddome into the deeper recesses of the forest where alone ripe timber now remains.—(*Report* 1858, *p.* 13.)

Central Provinces. In *Nagpore*, says Captain Sankey, there are two varieties of teak procurable one of a light, the other of a dark colour. The former seasons quickly, apparently does not lose its essential oil, and, by all accounts is a better and stronger wood than the darker variety, which, drawn from the Langee jungles, was that formerly employed in the Government departments. Door frames of 20 years' standing had on removal, been found ant-eaten, but these were the only instances of such having taken place. The natives of Nagpore use it particularly for the construction of bowries (by placing rough mortised frames one over the other as in the shaft of a mine) and they say that when immersed continually in water, it lasts in an extraordinary manner. They moreover construct all terrace roofs, boats, solid wheels of bandies, &c., from it, as well as use it extensively for furniture. Of the teak procurable, the average length was 30 feet, with a girth of 5 feet, and the maximum 64 feet with a girth of 4½ feet, and it was then selling at from annas 7½ to annas 12 per cubic foot.

In the *Jubbulpore* province, according to the Calcutta catalogue for the exhibition of 1862, one kind of this timber is there called, by the natives "Oil Teak" or "Seba Sagoon," and is found, it is believed, almost exclusively on the Vindhya, north of the Nerbudda, and is the best in the Jubbulpore provinces. Another kind, called by the natives "Patthareea Sagoon" or "Stoney Teak," is found in more hilly tracts, and, is shorter and more knotty than the first. A third kind, called by the natives "Doodheea Sagon" or "Milky Teak," is found chiefly south of the Nerbudda, on the Satpoora, and is the softest timber. The differences in the above three woods are said to arise from the soils in which they grow.

Burmah; on the 20th December 1852, *Pegu* was proclaimed annexed to the British territories. It has ever been a principal mart for teak; indeed, this wood constituted the most important article of trade ever since the foundation of Rangoon by Alompra in the year 1775, and it is, still, the staple export timber of the Tenasserim provinces, and from its abundance and its valuable property of being impervious to the white-ant, Dr. Mason tells us, it is used in Moulmein almost exclusively, both for building purposes, and for furniture. In 1848, eighteen thousand tons of this timber were exported, and Mr. E. Riley estimated that more than three thousand tons were used for home consumption ; the total value of the whole falling little short of a million of Rupees. A public journal mentioned that in 1860, the total number of first class teak trees are estimated at a million and a half in the whole of the Pegu forests, and of these Dr. Brandis considered that 30,000 may be girdled annually, but some error seems to have crept into the figures, as the Conservator, by his scheme, showed that only 25,000 would be obtainable even in 1869-70. The number of logs sold during the year 1860-61, appears to have been 8,834, and in the previous year 15,416 ; and the sums realized approximately were Rupees 2,20,850 and Rs. 2,31,240, the logs of 1860-61 having been of a larger size. The total revenues from the forests, however, from all sources, amounted to Rs. 2,49,752, and the total expenditure to Rs. 2,76,753. Dr. Brandis, tells us, in the Calcutta Catalogue for the Exhibition of 1862 and in his separate reprint, that the best teak forests in British Burmah are on the hills between the Sitang and Irawady rivers and in the Thoungyeu valley ; but, even these forests are poor compared with extensive tracts, covered with teak producing forests, to the north of the British boundary, especially on the feeders of the Sitang and Salween rivers and on some of the tributaries of the Meenam or Bankok river. The trees also are, as a rule, much larger and the shape of the stem more regular, in the forests of the Burmese empire, the Siamese kingdom and the Karenny country. The tallest teak tree measured in Pegu was 106 feet high to the first branch.—*Selections from the Records of Government of India, Foreign Department, No. XXVIII, p.* 11.

Even in the teak forests of Burmah, however, teak forms only a very small proportion of the forest trees, the greater part of which consists of various trees, mostly growing much faster than teak and much more able to propagate themselves by natural means, but almost all of which are, in comparison with teak, at present of very little or no value. It is, however, says Dr. McClelland, in the hill forests of Pegu alone, that teak appears in perfection. It is only found on the southern and western declivities where it is exposed to a strong sun. On the open and exposed ridges, it becomes scarce, and it disappears altogether on the northern sides of hills. It is the peculiar partiality it exhibits for the southern and western slopes that renders the distribution of teak so partial and limited Its immediate associates in the forests are Spondia acuminata, Swietenia chaplas, Inga xylocarpa ; Dalbergia robusta, and D. emarginata, Blackwellia propinqua and B. spirale, Pentaptera arjuna, and P. glabra, Sterculia alata, Careya arborea, Terminalia scevola, T. bellerica, Phyllanthus, Cluytia spinosa and Conocarpus acuminata, all large timber, rivalling the teak itself in magnitude and far out-numbering it in quantity. The soil of the teak forests presents the same uniformity as to geological structure. In the forests where the best teak is found, the soil is a grey stiff sandy clay, derived from the dark slaty sand-stone and slate clay, the particles passing downwards into comminuted slaty rhomboidal fragments. In the lower forests, where the soil is composed of laterite, teak is not found in the same perfection ; but, whether the difference be owing to the soil, or to the want of shelter and radiated heat from the immediate vicinity of hills, Dr. McClelland was not able to say, but nearly all the other varieties of timber associated with teak partake of the same peculiarity and attain a much larger size in the hills than they do in the lower forests. Teak is diffused throughout the general forest in the proportion of about one to five hundred of other trees. In what are called the teak forests, strictly speaking, it is found in the proportion of about one to three hundred, not equally diffused, but confined to certain localities of small extent where it constitutes the prevailing tree for a few hundred yards, seldom for a mile continuously. These localities are the warm southern or western slopes; sometimes it ascends to ridges, and when these are sheltered to the north and east by higher hills presenting a free south-western aspect, the teak assumes its largest and most lofty size. It must be quite obvious, therefore, that a tree depending on so many local peculiarities for its full development, cannot occur continuously to any greater general extent, yet the quantity of teak in these forests has been, and, when Dr. McClelland wrote, still was, very great, although the lower forests had been heavily worked and the best teak was only to be had high up in the forests from whence its removal will every year be attended with increased difficulty. This observation applies more particularly to the Thounzai and Oakkan, although it is more or less applicable to all the other forests. Still from the canal-like character of the Choungs, and the absence of any very formidable rocky impediments, the facilities they afford for floating timber in the rainy season is very great, even from their extreme sources. But even in these remote places the sources of the forest in full-grown timber are limited, and in the Phoungyee forest was, even then, almost quite exhausted. There are few inhabitants in these teak forests, certainly not above two or three to twenty square miles. Dr. McClelland also tells us that teak occurs in the outer forest on the Hlaine valley growing on laterite soil along with other trees, but whether from the facilities afforded for its removal or other cause, it is of small size compared with the dimensions it attains in the hills. In some places it assumes, from the number collected together, the character of teak forests, but every tree, on attaining a marketable size, had been removed. Steps had been taken to prevent this as far as possible, and he hoped that in the course of a few years, it would be seen whether these lower forests are really capable of yielding large teak or not.—*Selection Records of Government of India, Foreign Department, No. IX, from p.* 12 *to* 13.

Dr. Brandis informs us that teak trees, though scattered and of inferior growth, are not uncommon in the lower parts of the Tharawaddie district. The forest Tahpoon, the teak near Minhla-yoah and that below Seppadan on the Beeling are the nearest to the upper Hlaine or Konktlean river that had been observed. In Dr. Brandis' survey of the Pegu teak forests, he classified the trees in the following manner :—

a. of 6 feet or 4 cubits in girth and above.

b. of 4 feet 6 inches or 3 cubits in girth and above.

c. of 3 feet or 2 cubits in girth and above.

d. of a girth under 3 feet, and seedlings,

and, he adds, that the Burmese are accustomed to classify trees according to the number of cubits which the girth of a tree measures.

Growth of Teak. A forest patch of teak, when in full bloom, has much the appearance of a field of ripe corn, with a few spots of green interspersed. By this appearance, persons who work the forests are enabled to distinguish, at a distance, the teak patches from other trees. The leaf of the teak tree is large and round, in shape resembling a cabbage leaf, about 10 inches in diameter, but very thin, although its fibres are strong. The blossoms and berries are produced in large bunches : when in bloom, they may be compared to hops ; when in seed, as to size, to a bunch of grapes. The nut is of a dark russet-brown, and very hard ; when ripe, it falls to the ground, and plants itself. It is of rapid growth, and the trunk grows erect, to a great height, with copious spreading branches. In 20 or 25 years the teak attains the size of two feet diameter, and is considered serviceable timber, but it requires 60 to 100 years to arrive at maturity : after 20 years, however, a teak plantation would probably yield a valuable return in thinning. On the Coromandel coast, it flowers in June and July, and the seeds ripen in September and October. It grows straight and lofty with cross armed panicles of showy white flowers.

Dr. Brandis, who has watched the trees from year to year, observes that the rate of growth of teak, like that of all other trees, varies exceedingly, according to the locality and soil. It grows fastest in forests of deep alluvial soil. Here the roots can spread far, and the leaves remain green during a considerable part of the dry season. Thus, some of the largest seedlings on the Thingan-neenoung plantation had within 2 years attained a girth of from 10 to 13 inches near the root or of 8 inches at 6 feet from the ground, which in other localities would correspond to an age of from 4 to 5 years. And, in a similar locality on the banks of the Zimmay river (near Punko village) 9 trees were measured stated to be 7 years old with an average girth of $1\frac{1}{2}$ feet, usually the size of trees 10 years old. Also, the growth of the sprouts from stumps in the Kjoon-choung forests was an instance of unusually fast growth. Nine sprouts, estimated to be 25 years old, had an average girth of 4 feet 5 inches which girth teak trees generally attain with 35 years only. Further, six teak trees of different sizes in girth between 3 feet and 15 feet were measured in the Thoukyaghat forests in 1856. The same trees were measured again in 1859, and showed an average annual increase of 1 foot 6 inches, which rate usually is observed only in trees below 3 feet in girth. On the other hand, teak has a very slow growth on arid hills, with poor soil or with rocks near the surface. Here, often, not a single tree is to be found, exceeding 4 feet in girth, although the forest has never been interfered with either by cultivators or timber-cutters. The large number of Nathat trees (trees that have died) shows that the tree remains stunted and dies off before reaching a good size. Teak of this description is found on the hills between the Pah-choung and the Karenee country and on the dry hills of the Prome district near the frontier on both sides of the Irrawaddee. In the Bombay forests, he adds, teak 14 years old is said to attain a girth of 8 inches in the hills and of 14 inches in the plains. Both are remarkable instances of slow growth.—(*Selections from the Records of the Government of India, p.* 145.) Still more recently, Dr. Brandis remarks that teak when young grows rapidly, and he mentions that two stems dug out in July 1858, at the Then-ga-ne-noung nursery, in the Attaran forests, had been sown in March and April 1856. The plants therefore were two years and three months old. The largest seedlings had a girth of 13 inches, measured at 1 foot from the ground, and of 8 inches at 6 feet from the ground. They were 32 feet high, but this was an instance of uncommonly rapid growth. Trees ten years old, have usually a girth of 18 inches measured at 6 feet from the ground, with 22 years a girth of 3 feet is attained; but full-grown trees of 9 feet in girth cannot be supposed to be less than 160 years old. In a full-grown tree on good soil the average length of the trunk, to the first branch is 90 feet and average girth measured at 6 feet from the ground is 18 feet.—*Dr. Brandis, and Cal. Cat. Ex.* 1862.

Dr. McClelland, also (*Selections from the Records of the Government of India, Foreign Department, No. IX, p.* 107), tells us that teak is a tree of rapid growth when placed in a favourable soil. The first year the seedling attains the height of twelve inches, throwing out two large leaves; the second year it springs up to the height of three or four feet, after which it goes on increasing rapidly and bears seed in the eighth year of its growth, when it has attained the height of twenty-five feet and upwards. It is for the first four or five years, while the young plants are liable to suffocation from long grass and bamboos, that cultivation would be most requisite until the young trees secured possession of the ground. After that, all that would be necessary would be to protect the forests from fire and the unlicensed use of the axe. He adds that the lengthened period ascribed to the growth of teak, by writers on the Moulmein forests, was owing to their having been guided in their calculation by the number of what are called annual rings, exhibited by a section of the trunk. But Mr. Griffith, who is the best authority on questions of this nature, states that in tropical climates, where the alternations of seasons is less marked than in Europe, no dependence is to be placed in this test of the age of trees. Where no accidents of this nature occur, he considers fifty years to be about the period required for teak to attain its full-size. In the Malabar forests, he adds, sixty years has been found by experience to be the time required for teak to acquire its full-size. But, there can be no doubt that the period will be found to vary much in different forests, and to depend greatly on the early treatment that the young tree meets with, either in the shape of cultivation or accident.

Dr. Brandis further mentions (*Selection from the Records of Government of India, Foreign Department, No. XXVIII. p.* 56,) that teak belongs to that class of tropical trees, the wood of which is not uniform, but distinctly divided into concentric rings. It is evident that the growth of teak is not uniform, the yearly increase for the first six years being $10\frac{2}{11}$ lines in diameter, that for the next sixteen years $5\frac{8}{11}$ lines in diameter. By interpolation and diminishing proportionately the yearly increase in the years after the age of 70, a more complete scale of the growth of teak had been obtained, the rate of growth, as calculated from his observations, in Calcutta and Moulmein, is slower than that given for the Tenasserim provinces in the plains, but more rapid than the growth of trees 1,100 feet above the sea.

Statements of the measurement of a number of Teak trees of different ages.

Localities of the trees measured	Number of trees measured	Aggregate sum of these girths at 3 feet from the ground.		Average girth of one tree.	Average diameter of one tree.	Age of the tree.	Increase in one year.			
							From the age of	To the age of	In girth in inches	In diameter in lines
		ft.	in.	Inches.	Inches.	Years.	Yrs.	Yrs.		
H. C. Gardens, Calcutta	19	25	4	16	5 1-11th	6	0	6	2⅝	10 2-11ths
Private Garden, Moulmein.......	15	48	4	40	12 8-11ths	22	6	22	1½	8 8-11ths
H. C. Gardens, Calcutta	8	52	8	79	25 3-22nds	70	22	70	13-16ths	3

[illegible]imated average rate of growth of Teak in the forests of the Pegu, Tenasserim and Martaban Provinces.

Age of Trees. As assumed in report for 1856.	Age of Trees. As at present assumed.	Girth of Tree at 6' from ground.	Diameter of Tree at 6' from ground.	Cubic contents of a pole 30' long calculated on the ground log in cubic feet.	Annual increase of girth.	Average annual increase of timber in a pole 30 ft. long in cubic feet.	Corresponding age of other trees grown in Europe on good soil. Oak	Beach.	Larch.	Age of Teak trees actually measured. Age.	Girth.	No.	Where measured.
Yrs.	Yrs.												
...	...	...	...	...	1·8	0·534	...	...	...	...	...	...	
										2	8	17	Thingan-nee-noung teak plantation, measured in 1858.
										6	1·4	9	Calcutta Botanic Gardens, measured in 1856.
										7	1·6	9	Near Punko Village, Attaran, measured in 1856.
7	10	1·6	$5\frac{8}{11}$	5·34	1·5	1·35	23	17	17	14	1·2	...	Bombay Forest plains (communicated by Dr, Gibson.)
										14	8	...	Do Hills do.
18	2	3	$11\frac{5}{11}$	21·5	1·2	1·78	34	32	27	22	3·4	15	Moulmein Private Garden, measured in 1858.
										25	4·5	9	Sprouts from stumps Kyoon Choung Forests, Attaran do.
										25	3·2	...	Java taken from Junghuhn's work on Java, Vol. I, p. 253.
40	37	4·6	$17\frac{8}{11}$	48·25	0·72	1·51	43	41	36	...	...	..	
62	62	6	$22\frac{10}{11}$	86·	0·45	1·20	56	56	43	70	6·7	8	Calcutta Botanic Gardens, measured in 1856.
										82	7·10½	4	Hundrow Forests in the plains, age calculated from No. of annual rings taken from summary of papers on Tenasserim Forests, page 106.
										93	6·9	6	Hundrow Forests in the Hills, do.
										100	12·6	...	Java, see above.
93	102	7·6	$28\frac{7}{11}$	134·25	0·30	0·98	68	76	70	216	10·7½	5	Hundrow Forests on the Hills (from summary of papers p. 106.)
128	162	9	$34\frac{4}{11}$	193·25			115	89	110	246	12·8½	3	Do. do. do.

According to Dr. Brandis, the following is the rate of teak growth :

10 yrs. growth, 18 in. at 6 ft. from the ground
22 „ „ 36 „
37 „ „ 46 „ „ „ „
62 „ „
93 „ „ 76 „ „ „ „

Characters of Teak wood. Teak wood is of a brown colour and when fresh sawn has the fragrance of rosewood. Is is very hard, yet light, is easily worked and though porous, is strong and durable. It is soon seasoned, it shrinks little and being of an oily nature, it does not injure iron. It is probably the most durable timber known and is therefore of great value to ship-builders. It is the best wood in south-eastern Asia for ship-timber, house carpentry, or other work where strong and durable wood is required. It is rarely attacked by white ants, and, from long experience, it is esteemed the most useful tree in South-eastern Asia,—superior to every other wood, whether in or out of water. And this durability as Mr. O'Riley observes, renders it valuable in a climate like that of India, where the elements causing decay are so numerous and powerful, where dampness brings

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on rapid decomposition and the white ant devours without scruple. In general qualities, remarks Dr. Gibson, especially in endurance under exposure, it seems superior to all other Indian woods. Differences in quality, according to latitude, soil, or situation, are, however, very observable. It is commonly said that teak of the Northern parts of the Bombay presidency is superior to that of Canara ; that this again is of greater strength and endurance than the Malabar wood ; and that the teak of Pegu is the worst of all. For these distinctions, he thinks, there is some foundation, but by no means to the extent alleged. He has seen some teak grown in the richer valleys of the northern Dang, inferior in strength and compactness of grain to that imported from the inland hilly parts of the southern peninsula, as from the Anamallai forest, situated between Coimbatore and Malabar. There is, however, he adds, no doubt but that the eastern teak, from the Salem and other rivers, is considerably inferior in strength and durability, strength &c., to that of Malabar.

The *cohesive force* of teak wood varies from 13,000 to 15,000 pounds per square inch ; the weight of its modulus of elasticity is 21,67,000 pounds per square inch, according to Mr. Barlow's experiments ; and the weight of a cubic foot of seasoned wood, varies from 41 to 53 pounds. Representing the Strength of oak by 100,

that of teak will be 109
Stiffness of oak by 100, ,, 126
Toughness of oak by 100, ,, 94

From which it appears that, except in toughness, it is much superior to oak in these properties, but these proportions are drawn from two or three experiments on teak, and probably were tried on every select specimens : whereas those for oak, were on a mean specimen, selected from pieces of oak of various qualities.

Dr. Brandis, moreover, tells us that the strength and density of the teak timber of British Burmah vary exceedingly, according to the locality where the trees grow. The extremes observed in preliminary experiments were 40 and 50 lbs. per cubic foot, and 190 lbs. to 289 lbs. breaking weight. Mr. Rohde, who has paid much attention to these points, had frequently been struck with the want of strength in logs apparently sound, but had generally found the darkest veined wood the strongest. He says teaks will be found to differ in weight from thirty-nine pound six ounces to fifty-two pounds fifteen ounces the cubic foot, when seasoned ; and the heaviest, when green, were only fifty-seven pounds nine ounces the cubic foot. He had been told that some of the teaks from the Cochin forest weigh as much as sixty pounds the foot, when green. He adds, Major Campbell's experiments show that the weight of a cubic foot varies in the several specimens from 52 to 37 lbs., practical value of S. 92 to 51. In Dr. Wight's experiments, with Coimbatore teak, it was proved as regards the strength, as shown by the weight it was found capable of sustaining, that it is inferior to several other woods tried there. The average of 6 specimens was about, but under, 400 lbs., and Dr. Gibson remarks that, in strength, it is, as Dr. Wight observes, inferior to some other trees, of which Dalbergia Oojeinenis or Tunnach may be mentioned as one. Mr. Edye also remarked that the Malabar teak is considered the best, and is always most valued in the British Government dock-yards, and it is now admitted that the teak in Malabar differs from that of the Anamallai.

Indeed, the varying qualities of the different teaks, have long been well known to practical men. The Malabar teak which grows on the western side of the ghat mountains has been generally esteemed the best and always preferred at the Government dock-yards. The second-rate teak of Palghat was found by Colonel Frith of a light colour with a specific gravity of 0·852. The Ceylon teak, "Taikke Ceylemey" of Mr. Mendis, which grows in the western province of Ceylon, and is used there for bridges and buildings, weighs 44 lbs. per cubic foot, and was esteemed to last from 15 to 60 years. That kind is described as a rather hard, fine, close-grained and somewhat heavy wood. He says of the Cochin teak "Taikke Cochini" which is used in Ceylon for carts and waggons, bridges, in building, and for arrack casks (and the wood of these casks imparts a fine colour and flavour to the arrack,) that it weighs lbs. 44 to the cubic foot and lasts from 15 to 90 years. Cochin teak is elsewhere described as a rather hard, though somewhat coarse and open-grained, moderately heavy wood, of a lighter hue, rather coarser texture, and considerably more ponderous than the Moulmein teak. The hill teak of Tinnevelly, (qu ? kul-teak ?) is described by Colonel Frith as of a light brown colour, and used for general purposes. The kullen teak of Travancore, is described as of a brown colour, and specific gravity 0·749, and as used for buildings, wheelwright's work, &c., and the kullen teak of Palghat, as of dark colour, as the best teak, and very strong and large. This kullen teak is perhaps identical with what Mr. McIvor describes as "kul-teak," a variety of Tectona grandis, of the Wynaad about Sultan's Battery, scarce, but considered superior to the common teak ; and, under the Tamil name "oomy takoo maram" at Coimbatore, Dr. Wight felt uncertain whether to view this as variety

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or a distinct species of teak. Specimens tested there proved very inferior in strength to the true teak, breaking with a weight of only 300 lbs., while the other sustained above 400.

Mr. Rohde tells us that the Godavery teak varies much in density : much of it is finely veined ; generally it is heavier than the Rangoon teak, but not equal to some from the Malabar coast. The dark or heavy teak of the mountains bordering on the Godavery is very little, if at all, inferior to that of Malabar, but a good deal of the Godavery teak is very open-grained. The logs brought to market are always irregular in shape. Where strength, without any regard to size and shape, is required, the small heavy logs brought down by return bullock carts to Masulipatam may be used. There is a variety, says Dr. Roxburgh, which grows on the banks of the Godavery in the Deccan, of which the wood is beautifully veined, streaked and mottled, closer-grained and heavier than the common teak tree, and which is well adapted for furniture. Some of the old trees have beautiful burrs, resembling the Amboyna wood, which are much esteemed. He had obtained an excellent specimen of the burr of the teakwood tree, through Dr. Horsfield, of the East India House.

In Mr. Edye's time teak had been largely brought into use in the British Navy, at Bombay, Calcutta and Cochin, and he gave the following lists of ships of war, till that time, built of this timber : a list which could doubtless be now greatly extended.

Ships of the Line.—Minden, Cornwallis, Melville, Malabar, Wellesley, Ganges, Asia, Bombay, Calcutta, Hastings.

Frigates.—Salsette, Amphitrite, Trincomallee, Seringapatam, Madagascar, Andromeda, Alligator, Samarang, Herald.

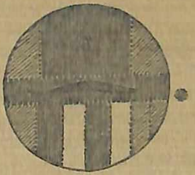
Sloops.—Victor, Cameleon, Sphynx, Cochin. It has been considered by many, that a ship built of this sort of wood would last good from thirty to fifty years, for which time report says, many ships have been known to run in India. The old Milford, Bombay ship, in the country trade of India, was the oldest and best conditioned ship that ever came under Mr. Edye's notice. She had been, he says, built of teak timber about thirty-five years before he saw her ; she had been constantly at sea, and only had a small repair during that period. She was built of the Malabar teak.

Teak timber has been found ill adapted for gun carriages. Indeed, when it is observed how readily it splits, it is surprising that it has been for so many years applied to this purpose, especially for the felloes of the wheels. For ship-building purposes, teak is superior to every other sort of wood, being light, strong and durable, whether in or out of water. Dr. Gibson says that Naneh or Benteak is brought to use in the Bombay dock-yard, but Benteak is the Lagerstrœmia microcarpa, and is quite a different tree. Its wood is of a light colour, specific gravity 0·591, inferior, and used for buildings and common carts.

In Mr. Edye's time, it was generally considered that there were three sorts of teak in use. And, first, that sort which grows to a very large size, is of an open, porous-grain and very much resembles Dantzic oak : it was found in the forests at the foot of the ghats ; in valleys where the soil is deep and rich ; and on the banks of great rivers. On the bank of the Iruari river, near the ghats, about eighty miles from Cochin, he caused such a tree of teak to be felled. It was seven feet in diameter, and at seventy feet from the butt it was twenty-six inches in diameter. It was not deemed durable as timber ; but, for planks and boards, such as the native carpenters use, it is preferred to any other of the small knotty woods.

It is a fact, he adds, which his experience in the country had taught him, that all teak-timber, above twenty inches in diameter at the butt, has the heart shake from end to end, and consequently, requires much care to convert it to use; which should be done by a saw-cut in the heart of the wood and then either of the two parts might be used as timber (A) or plank (B.)

1

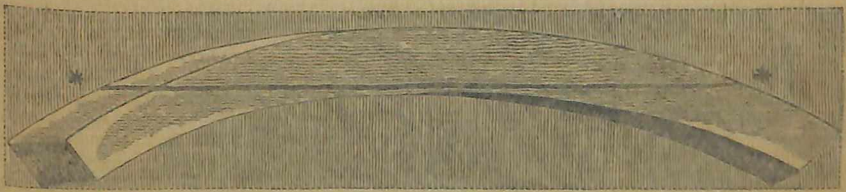


* Section of the tree 2½ feet diameter, with the heart shake shown. The dotted lines mark the best method for conversion by sawing it.

But teak generally grows straight, and, consequently, for the timber of a large ship its curve crosses the grain of the wood: the shake runs through the timber on the outside at the head and heel, and, in this inside, it follows the curve in the middle, nearly breaking through to the surface. This shake, if four or five inches broad and an inch or an inch and a half open in the heart of the timber, must be totally destructive to it; as must have been the case in the Minden seventy-four gun ship.

The next sort of teak on the coast, he says, is that which grows in the forests of the ghats. It is curved, hard and knotty, as the soil is not deep, its bed being rocky. This timber resembles in growth and appearance the English oak; its weight is very considerably more than that which grows to the large size; and the texture and durability of this timber is well known to those who are acquainted with the grain of woods.

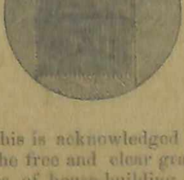
2



* Heart shake of a curved timber cut across the grain of the wood.

The third sort of teak he continues, is procured from Pegu, Rangoon, Ava and the Burmese territories. For ship-building it is very inferior to that of Malabar. It is generally considered, by persons unacquainted with the nature of timber, that "the teak from that country is superior to any other in India," this is acknowledged by competent persons so far only as regards the size of the tree, and the free and clear grain of the wood. There can be no doubt that it is better for purposes of house-building, and the general uses of the native

3



* The heart shake shown by the log being sided and converted from its full size.

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carpenter, from the ease he finds in working it. This timber, as well as that before described, grows in a rich deep soil, and, consequently, its maturity is rapid and its dimensions large; but the texture of the wood is as different from that of the forests of the ghats, as the American and Dantzic are from the English oak. At Rangoon and Pegu this timber is split in the heart shake into two parts, which the natives call shimbin, and this, Mr. Edye considers, shows the freeness of the grain of the wood. These pieces are priced according to their size; and this sort of teak is better known to the merchants and captains of the country trade than any other, on account of its use for the repairs of vessels, or as sea-shore timber."

Mr. Edye says the teak may be said to be the most valuable tree in India. It produces, he says, a good oil, which is used with paint as a substitute for linseed-oil; and which also makes a good varnish for paint or wood, and is known generally by the name of wood oil. The leaf of this tree is large and round, in shape resembling a cabbage-leaf, about ten inches in diameter, but very thin, although its fibres are strong. The blossoms and berries are produced in large bunches when in bloom, they may be compared to hops; when in seed, as to size, to a bunch of grapes. The nut is of a dark russet brown, and very hard; when ripe, it falls to the ground and plants itself. Experience, says Edye, proves that teak ships, if kept in India, or within the tropics, in actual service, would, at the end of seven or fourteen years, be in a better state than if kept in ordinary, subject to the changes of the climate of England. There cannot be a doubt that the climate and temperature of its native atmosphere is the most favourable to its durability. Its value, for the purposes of ship-building does not, he says, consist merely in its durability; a still greater advantage is, that the ship is at all times ready for service, while ships of European wood, constructed with oak and fir, are constantly warping and crazy, and in forty-eight hours after the caulking of the top-sides are frequently as leaky as before; the health of the crew suffers, in consequence, at the change of the monsoon, from exposure to the damps of a tropical climate; and also, from this cause, the carpenters' crew are kept fully employed. But the teak ship, when well caulked, remains dry and comfortable to the crew and is always an efficient ship for service. The many contradictory reports of sailors on the state of ships of war on foreign stations, is to be placed to the want of knowledge of the true state of facts. It is well known in the dockyards that, by a continual caulking of the sides or decks of a ship, the wood is so completely compressed on the seams and edges of the plank by the caulking iron, that the oakum is forced through the seam into the ship, and that that seam can never be again caulked tight. From this cause, the oakum in the seam becomes wet and rotten; and the ship's crew are exposed to the injurious effects of inhaling the putrid air through the openings of the ship's timbers. The confined state of a ship under hatches in a tropical climate, is well known to all who have been on board one in the heavy tropical rains and gales of the wind, when the monsoon sets in, and which lasts for days and weeks together."

Upon the whole, the Malabar teak seems the best. But that of Rangoon is lighter and more open and straight in the grain, and is preferred for masts and spars. It is also said that teak from Pegu, is of a light colour than that of the Peninsula of India. But, in all these varying, and sometimes conflicting accounts, as to the strengths and weights of the teakwoods grown in the several provinces of India, until we learn that the processes adopted, in killing, felling and seasoning, are similar, we shall not be in a position to judge as to the now reported differences. Major Morgan (Report, 1861-2, para. 100) tells us Malabar teakwood had been discontinued in Madras for the use of gun-carriage wheels, by the superintendent, as it was found brittle. But he had explained to Colonel Maitland, and shown him that the manufactory must have been supplied with girdled teak. Good cross-grained Malabar teak, Major Morgan adds, is superior to any wood for wheels and the girdling of teak, he says, has long ago given up, as it makes the wood brittle, and deprives it of its oil. Nevertheless, writing in 1854, Dr. McClelland mentioned, as his opinion, that full-grown timber requires to be killed at least two years before it is cut down, and in carrying this out, he took the precaution, as early as November 1853, to have 800 full-sized trees killed in Thounzai forests, and 600 in the Oakkan forests; and, he adds, "it will be necessary, without loss of time, to extend these provisions as far as the resources of the forests will allow.—(*Selec. Records of Govt. of India, Foreign Department, No. IX. p. 24.*) Still more recently, (in para. 32 and 41, pages 11 and 13, *Selec. Govt. of India, No. XXVIII,*) we find the following course of operations laid down :—

1. "*Marking.*—All trees measuring 6 feet in girth and above in the first division, will be marked in 1857 in such a manner that the marks shall remain visible for 24 years.

2. "*Girdling.*—One-fourth of the trees thus marked, will be girdled immediately by a circular cut through the bark, about one inch into the wood.

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"The trees will always be allowed to stand three years before felling, which is one year longer than what is generally considered to be sufficient for seasoning in this climate.

"We must, for the present, therefore limit our improvements to the rule which already forms an article of every forest contract concluded for this and the next year; viz., that no tree, the lower part of which is not hollow, is to be felled higher than one cubit from the ground. And first, we must mention a few circumstances, that will tend to increase the number of trees to be girdled and felled. All trees of whatever size they may be, that show evident signs of decline and decay must be girdled at once. For trees that are beginning to be Nathat, this measure is desirable, because the timber of a Nathat tree is always inferior in appearance, and often in quality, to that of a sound tree. For those trees that show signs of decline from having been attacked be a parasitic ficus, which is particularly destructive to teak trees in this country, (Pegu) this measure is therefore necessary, if we wish to save their timber from destruction, as the timber of a tree killed by a parasitic ficus is of little or no value.

"Also, all isolated trees must be spared, in order to obviate a want of seedlings in places to which the seeds of other trees could not be carried by natural causes." Thus in the Pegu Province the girdling of teak seems to be in full operation.—*Dr. Brandis, Selec. from the Records of Govt. of India, No. XXVIII, pp.* 10 *and* 13.

The advantages of girdling teak trees in the Central Provinces are doubted by Lieutenant Doveton. He reports that "since taking charge of this Division, all trees to be felled in the reserves by Government Agency have been girdled. Teak was found to die very soon after the operation. Beejasal too died rapidly, though it took longer than teak, but Saj, whether girdled in the cold or hot season, did not die till after the ensuing rains. Attempts were made to kill Kahoo trees by girdling, but these were utter failures—the bark growing over the wounds on the first fall of rain. The girdled trees appear not to have been attacked by insects, and, as a rule, there have not been fires in the localities where trees were girdled."

"With reference to the girdling of teak, it seems to me "he says" that the process tends to a certain extent to make the timber brittle. This was found to be the case with a number of trees which were girdled for some European timber merchant in the Boree forest prior to its being formed into a reserve. When these trees were killed by this Department, many of them used to split and splinter in the fall, rendering some portion of the timber quite useless, whereas trees that are felled without being girdled do not seem to be liable to injury of this kind. The natives of this part of India seem never to have practised the killing of trees before felling, and yet you find timber cut by them a century ago as sound as if it had only been cut for a few years. While visiting the Kaleebheet forest last year, I found in the old fort there pieces of teak timber which had evidently been put into the building at the same time as the masonry: they appeared to have been exposed to the weather for many years, but on being cut were found as sound and fragrant as new timber."—*Major Pearson, C. P.*

Uses.—Teak is used in house-building for beams, for furniture of every description, and largely in ship-building. In the Madras gun-carriage manufactory, it is used for all parts of light field-carriages (except the beams); waggons and their limbers (except poles and splinter bars); also for heavy field and garrison carriages; garrison traversing platforms; for gun and mortar platforms; and for all parts of heavy and light mortar-carts; store-carts (with the exception of poles and splinter-bars): platform, line, and water-carts; gins, and wheel-work; heavy and light field ammunition boxes: transport carriages and limbers and furniture work.—*Drs. Roxburgh, Wight, Falconer, McClelland, Gibson, Cleghorn and Brandis; Messrs. Edye, Rohde, Earl, K. O'Riley; Cal. and Mad. Cat. Ex.* 1862, *Madras Proc. Ex.* 1851, *Majors Morgan and Pearson, Captain Sankey, Lieut. Doveton.*

TECTONA TERNIFOLIA, *Buch.*

Tectona Hamiltonia, *Wall.*

This species of teak grows on the banks of the Irrawaddy, at Segaen, Prome, Ava, and at the foot of Taong-Dong, and, from native descriptions, Dr. Mason imagines itis found in the province of Yay. It flowers in March. It has comparatively small leaves, and its wood is inferior to that of T. grandis.—*Dr. Mason, Voigt.*

TEE KA LOUNG or THA-KA-DAT-GHEE, Burm. A timber tree of maximum girth 3 cubits, maximum length 22½ feet. Abundant at Morgui and Tavoy. When seasoned it floats in water. It is used for bedsteads, and for house-building. Recommended as a durable, tough wood for helves or for hammer handles.—*Captain Dance.*

TEKKEER ATTOVYE ANJELLY, Tam. A wood of Travancore, of a brown colour, specific gravity 0·528, 4 to 6 feet in circumference, used for house and ship-building.—*Colonel Frith.*

TELEGA, Tel. Gardenia, *species?* A wood of the Godavery forests and Dekhan. Wood very hard, would be very good for turning.—*Captain Beddome.*

TELEYA, Hind.? A tree of Chota Nagpore, with a soft, red wood.—*Cal. Cat. Ex.* 1862.

TELLE or PAYANE, the Tamil and Malayala names of a tree on the Malabar coast and Travancore, about sixty feet in height, and two feet and a half in diameter. It is an inferior sort of "*pine*," and is named by natives Dupi maram. It produces an inferior sort of damah, or resin, which is boiled down with cocoanut oil. When thus prepared, it is a substitute for pitch or resin, but very inferior. The wood is used for the masts of pattamahs, catamarans, canoes, &c., but it is not durable.—*Edye, Forests of Malabar and Canara. Qu.?* Is this a Shorea or a Vateria?)

TENBOW or Black Heart Wood, grows in the Malabar forests to about eighteen inches in diameter, and from twenty-five to thirty-five feet in height. It is considered by carpenters a useful wood for general purposes, in house-building, and for native vessels and implements of agriculture.—*Edye, Forests of Malabar and Canara.*

TENASSERIM WOODS have already been noticed under Amherst, Burmah, Malacca, Martaban, Moulmein, Pegu, Tavoy. The name of this province of the Empire has now merged into the more comprehensive term of British Burmah. But, the first edition of the Reverend Dr. Mason's valuable work, was styled Tenasserim, and it seems suitable to give, here, the names of the timber trees which he noticed. They are as under :—

Tectona grandis.
Tectona Hamiltonia.
Bassia longifolia.
Inga xylocarpa.
Fagrœa fragrans.
Diospyros, *sp.*
Diospyros, *sp.*
Bauhinia, *sp.*
Swietenia mahogani.
Pterocarpus Wallichii.
" dalbergioides.
Syndesmis Tavoyana.
Vatica robusta.
Vatica, *sp.*
" "
Hopea odorata.
Vateria lanceolata.
Dipterocarpus lævis.
Dipterocarpus grandiflora
Dipterocarpus, *sp.*
Terminalia.
Vitex arborea.
Gmelina arborea.
Cedrela toona.
Acacia sirissa.
" stipulata.
Acacia odoratissima.

Dalbergia.
Quercus fenestrata.
" turbinata.
" velutina.
" Amherstiana.
" Tirbba ? ? ?
Lagerstrœmia Reginæ.
Grewia.
Calophyllum.
Garcinia.
Gordonia floribunda.
" integrifolia.
Bruguiera Rheedii.
Rhizophora gymnorrhiza.
Careya arborea.
Artocarpus echinatus.
Myristica amygdalina.
" sphærocarpa.
Bignonia.
Sonneratia acida.
Laurus.
Kyanan.
Maybgoung.
Casuarina muricata.
Heritiera minor.
Berrya ammonilla.
Laurus (sassafras.)

Odina wodier.
Erythrina indica.
Erythrina, *sp.*
Laurus.
Yamanee.
Elœocarpus.

Dalbergia latifolia.
Apocynaceæ.
Murraya.
Zalacca edulis.
Agathis loranthifolia.
Pinus Latteri.

These, adds Dr. Mason, are among more than a hundred trees in the Tenasserim provinces that furnish valuable woods, of which the selection of fifty or sixty would embrace the most useful.

Mr. E. O'Riley remarks that the useful kinds of timber which abound in the forests, in addition to teak, are very numerous; many of these possess qualities superior to that timber in regard to durability under exposure to alternations of heat and moisture: and, unlike teak, when used as posts for houses, several are impervious to the attack of the white ant; their specific gravity, exceeding, for the greater part, that of water and their excessive hardness forming the principal obstacles to their being more generally known. The principal trees are the following: some of them classed by Dr. Wallich, in his notice of the forests of these provinces.

1. Anan.
2. Thengan, Hopea odorata
3. Peengado, Acacia.
4. Bambwai.
5. Peemah : Lagerstrœmia
6. Kouk H'moo.
7. Padouk, Pterocarpus.
8. Theet kha.
9. Toung baing. [ebony.
10. Yin-dic or Bastard
11. Kuzee-tha, similar to Boxwood in grain.

Several others of small dimensions are in general use with the natives for household and other useful purposes requiring a hard and close-grained material.

Of the foregoing, he adds, the "Anan" stands pre-eminent in its characteristics as a forest tree of the largest dimensions, its straightness and freedom from internal decay, and more especially in its indestructibility under all circumstances of useful appliance. A specimen of this wood had been brought to Mr. O'Riley's notice which, for 60 years, had formed the supports of a native bridge over a creek in his vicinity; embedded in mud and exposed to the alternations of wet and dry during each tide, it had undergone no change beyond the decay of the sap parts immediately below the bark, the posts of the bridge consisting of young trees cut on the spot and so applied at once. This unexampled durability renders the Anan of these provinces a valuable article for railway purposes; and, should the attention of parties be directed to it, the supplies to be obtained from these forests alone for railway sleepers are unlimited; it would also be found to answer admirably for such ship-building purposes as to require extra strength and durability, and would afford the finest keel-pieces in the world.

Bam-bwai and Peen-ga-do possess the same property as Anan in resisting decay, but are less abundant, denser in grain, abound in knots, and are smaller in size than that timber: they are, however, prized by the natives for their useful properties, and are with Thengan generally used in the whole tree as posts for monasteries, houses, &c.

The wood in most general use for almost all purposes, but principally for large canoes, which form the bottoms of the native trading crafts, is Thengan, this is owing to its being more plentiful than most of the others, easily worked; and, by killing the tree before felling, as with teak, is rendered capable of floating; this process however is rarely observed, the tree selected for working is felled and hollowed on the spot, and the canoe removed to the neighbourhood of the water to undergo the process of widening by fire, some trees producing by this rude process canoes of 60 to 70 feet long by 6 to 8 feet breadth across the centre.

"Kouk h'moo," "Toung baing" and "Theet kha" are also much sought after by the natives for boats, the former is also well adapted for spars for vessels, being straight, light, of large dimensions and of long fibre.

"Toung baing" is equally lasting with Thengan, but scarcer than the latter and of sizes to afford a large canoe.

"Theet kha" is a light timber, easily worked and, from its possessing the valuable property of being exempt from the attack of the "teredo," is in great request for small canoes: it is a scarce tree however. In common with "Theet kha," both "Anan" and "Peengado" are impervious to the destructive attack of the "teredo," the two latter may possess such property as the consequence of their closeness of fibre and extreme hardness, but the same reason cannot be applied to "Theet kha" from its opposite characteristics. In the latter case it is owing, in all probability, to the existence of some acrid principle in the wood (implied by its name "bitter wood") which, similar to oxide of iron, has the effect of repelling the insect.

"In the construction of wharfs and embankments on the river face, both "Anan" and "Peengado" would be found valuable for posts, and if proper care be observed in the selection of the timber and in freeing it from all the sap portions of the tree, it would doubtless prove as lasting as brickworks.

"Padouk" affords a fine timber for many purposes, and from its large size and even texture has been brought into general notice. Several experiments have been made in the ordnance department of Madras to ascertain its fitness for gun carriages, but with what result, Mr. O'Riley was unable to state. As a substitute for teak, should it be found to answer for the above stated and other purposes, it is valuable, and from its large size, its even grain, rendering it susceptible of a high polish, and beauty of colour and pattern, it appears to be well suited to the manufacture of articles of furniture.

"The foregoing are the most generally known woods of the forests in common use with the natives, but to them might be added a list of forty to fifty others more or less useful. Of the remaining forest trees and shrubs, the following possess valuable properties, adapted to a demand for Europe consumption.

Sapan-wood, Caesalpinia, Teni-yeit, Burm.

Jack, Artocarpus, Tein-gnay, Burm.

Red-dye, Morinda citrifolia, Nee-pa-tsay.

"For many years past, a trade in sapan-wood from Mergui to Dacca has been prosecuted by the native boats, the article being obtained from the Sapan-wood forests lying near the frontier hills, from the Eastern side of which large supplies are annually imported through Bangkok into Singapore. It is also found throughout the valley of the Great Tenasserim river, and is said by the Karens to be plentiful in the vicinity of the head waters of the 'Hoin bwai,' and 'Dagyne.' In isolated patches it is found generally distributed throughout the whole provinces.

"The dye obtained from the wood of the 'Jack,' as prepared by the natives, is a brilliant orange yellow, which is obtained by the addition of an infusion made from the leaves of the 'Don-yat' producing a brilliancy of colour not excelled by the best English dyes. The new sacerdotal dress of the Poongyees evince the effect of this process, and were a specimen of the dyed article sent home it would be found to surpass most of the British range of dyes of its class, and as a process not requiring the application of any of the metallic bases as a mordant, would doubtless become an article of inquiry and consequent standard value.

"The red dye obtained from the roots of the Morinda citrifolia is equal in every respect to that of the sapan-wood; it is in fact in general use with the natives for dyeing the yarn of the native cloths, both silk and cotton; and with the exception of some specimens of Java dyes obtained from the same tree, I have "he says" rarely seen better single colours of the kind; it must be borne in mind in relation to such a comparison, that the use of a mineral mordant in the native process is unknown, and with the exception of weak ley made from the ashes of some of the plants of the jungles no other application is made beyond the simple solution of the extract from the wood itself.”—*Dr. Mason's Tenasserim, Mr. E. O'Riley in Journ. Ind. Arch.*

TENG-KHAT, BURM.? This is a heavy wood of Amherst, solid and fit for turning purposes; used for rice-pounders, &c.—*Cat. Ex.* 1851.

TENTUKIE, the Malayala name of a Ceylon tree which grows to about twelve or eighteen inches in diameter, and twelve feet high: it cannot be considered valuable. It is sometimes used by the natives for inferior and common purposes.—*Edye on the Timber of Ceylon.*

TENTOOLLEE OR KOYAN, URIA? In Ganjam, the common tamarind tree?—*Captain Macdonald.*

TERMINALIA. This genus of plants is found in the tropical parts of Asia and America, and many of them furnish valuable timber and other useful products. The bark of Terminalia arjuna is used in India, in medicine, for its astringency, and in dyeing as that of Bucida buceros in Jamaica, and that of Terminalia benzoin in the Isle of France. The galls found on the leaves of T. chebula, are powerfully astringent, and used in dyeing yellow and black, the ripe fruit of T. bellerica is reckoned astringent, and that of T. Moluccana is like it. That of T. chebula, in an unripe state, and of different ages (v. Fleming, As. Res. XI, p. 182, 8vo.), has long been known under the names of black, yellow, and chebulic (Kaboolee from Cabool) myrobolans, and considered generally laxative. The fruit of T. citrina, as well as of T. augustifolia and T. Gangetica is like that of T. chebula, and employed for the same purposes. The kernels of T. catappa have the same hindi-persian name, “badam” applied to them, as to those of the common almond, they are eaten as such, and are very palatable; Dr. Royle had seen the tree as far north as Allahabad, in gardens. The kernels of T. Moluccana, and those of T. bellerica are also eaten. From the latter a gum exudes, as from Combretum alternifolium in south America: a milky juice is described as flowing from T. benzoin, *Linn. f.*, which, being fragrant on drying, and resembling benzoin, is used in churches in the Mauritius as a kind of incense.—*Royle, Ill. Him. Bot., p.* 209.

TERMINALIA, *Species.* Thuphanga, BURM. A Tavoy timber tree.—*Wall.*

TERMINALIA, *Species.* Dr. Mason says, that the Tenasserim province yields the T. chebula, and two other species. One of these he describes as “the bitter wood of Tenasserim,” (is it the Theet kha?) a small tree, used for boats in the neighbourhood of Amherst, and exempt from the attack of the teredo. Mr. Mason had never seen the tree, but its leaves and fruit were furnished to him by Mr. O'Riley, and they indicate it to be a species of Terminalia, and of the section Pentaptera. The good timber and bitter bark assimilate it to Roxburgh's *P. Arjuna*, but the foliation is different.

The other species, a large timber tree, is common in the interior, and its winged fruit indicates its connection with Dr. Roxburgh's genus Pentaptera.—*Dr. Mason's Tenasserim.*

TERMINALIA, *Species.* Hanagal, CAN. A Mysore wood, used for furniture and house-building.—*Captain Puckle in Mad. Cat. Ex.* 1862.

TERMINALIA, *Species.* Kosee, TEL. A tree of Ganjam and Goomsur, extreme height 50 feet, circumference 4 feet, and height from ground to the intersection of the first branch, 22 feet. Used for posts, door frames and rafters, and burnt for firewood, being tolerably plentiful.—*Captain Macdonald.*

TERMINALIA, *Species.* Orjoono, TEL. Terminalia alata? T. glabra? A tree of Ganjam, extreme height 100 feet, circumference 8 feet and height from ground to the intersection of the first branch, 36 feet. This is used for making boats in the same way as the Holondho and Jamo. The tree is not very common in Goomsur, but abounds in the forests of Bodogoda.—*Captain Macdonald.*

TERMINALIA ALATA, *Ainslie, W. Ic.* 195.

Terminalia tomentosa, *Roxb.*

Kura-marthi maram. CAN.
Jungli karinj. DUK.
Maroodum tree. ANGLO-TAM.
Asan? HIND.
Jungly karinj. ,,
Urjun???
Keenjul? MAHR.
Kunjul? ,,
Arjuna?? SANS.
Kumbuk? SINGH.
Marudum maram. TAM.
Muddi chettu. TEL.

The bark.

Marudum bark. ENG.
Arjuna. SANS.
Marudum pattai. TAM.
Muddie patta. TEL.

A very large tree of the peninsula of India from Coimbatore north to Chota Nagpore? furnishing a useful timber which is employed on the western coast, for house-building and making canoes. Dr. Wight had not seen it in use in the Coimbatore district. He says that the tree only differs externally, from the Curri-murdah (Terminalia glabra? by being hairy. Dr. Gibson seems to have been doubtful as to the identity of the tree, indicated by Dr. Wight, for, he thus remarks:—“Terminalia alata(?) Pentaptera paniculata, Keenjul(?) I believe that our Keenjul is here meant. It is common to the south, but not known to the northward. Wood is equal to the common Aeen. The Aurora cruiser was built of this wood.” The wood of which a specimen was sent from Chota Nagpore to the Exhibition of 1862, as that of the Terminalia alata? T. tomentosa or Asan, HIND. ? was described as a hard, brown timber.—*Drs. Wight and Gibson, Cal. Cat. Ex.* 1862.

TERMINALIA ANGUSTIFOLIA, *Jacq.*

Terminalia benzoin, *Linn.* | Catappa benzoin, *Gærtn.*

Narrow-leaved Terminalia. ENG.

The dried milky juice of this small tree is fragrant and resembles benzoin, for which it is used as a substitute in the Mauritius churches. Its fruit is used similarly to those of Terminalia chebula.—*Voigt.*

TERMINALIA ARJUNA, *W. & A.*

Terminalia Berryi, *W. & A.*
Pentaptera arjuna, *Roxb.*
" augustifolia ? *Roxb.*

Arjun.	BENG.
Touk-kyan.	BURM.
Belee waulkee.	CAN.
Urjuna.	DUK.
Urjun-sadra?	"
White aeen.	ANGLO-HIND.
Arjun.	HIND.
Urjen.	"
Kahua.	"
Koha.	HIND.
Kowah.	" of Jubbulpore.
Arjoon.	MAHR.
Sadura.	"
Azun.	"
Jumla of Panjab.	
Vella marda.	TAM.
Tella "	TEL.
Eri maddee.	"

This tree grows scantily in the Siwalik tract up to the Ravi, grows in Bengal and in the Errawaddi jungles S. E. of Surat. It grows also, in Canara and Sunda, but only by rivers and streams mostly below the ghats, and reaches, there, an immense size. As a forest tree, Dr. Gibson tells us, it is rare in the northern parts of the Bombay side, but very common in the south Konkan, from Ramghur southward and, there, too, always found in the vicinity of streams and rivers. It reaches, everywhere, a very large size, and is esteemed equal to the Black Aeen, though the rapidity of its growth would hardly countenance this opinion. In the Nagpore territories, according to Captain Sankey, it grows almost exclusively, on the banks of rivers, and to an enormous size; but, being in that province frequently rotten at the heart, it does not always reward the labour of cutting. Mr. Jacob writing from the Central Provinces says, Terminalia arjuna, bellerica, chebula, and tomentosa, are abundant, but none of real value as compared with several other timbers. The last-mentioned is the best, but when seasoned becomes so hard, and has such a cross-grain, that it is next to impossible to work it nicely. In Pegu, Dr. McClelland mentions that next to teak, the most valuable kinds of timber found in abundance, in the southern forests of Pegu, are *Pentaptera glabra*, and *P. arjuna*, which present clean trunks of six to eight feet in diameter, and fifty to eighty feet high, without a branch; they would afford excellent mast-pieces and spars for naval purposes, and might be tried for gun-carriages. Dr. Mason says this valuable timber is found growing in all the teak forests of Pegu, and consists of two kinds, both of equal value. He adds that its wood is dark-brown, and the timber is as strong as teak and usually attains a girth of from seven to nine feet, with height in still more lofty proportion. This timber had never, he believes, been fairly tried for ship-building. In Nagpore, the timber of Arjoon is of a deeper red than Bejasar, more of a brown-red. It is heavy, but splits freely when exposed to the sun's rays, white-ants attack it. Its strength is undoubted, and carefully selected specimens would, Captain Sankey thinks, be valuable. He classes it as a tie-beam and rafter wood. In Nagpore, the length of the timber is from 18 to 30 feet, and girth from 4½ to 4 feet, and it sells there at 5½ annas the cubic foot. The bark is justly celebrated as an application to wounds.—*Voigt, Drs. Gibson, McClelland and Mason, Captain Sankey, —W. Jacob, Esq., C. P.*

TERMINALIA BELERICA, *Roxb.; Cor. Pl.; Rheede.*

Terminalia punctata, *Roth.* ?
Myrobalanus bellerica ?

Beleyluj.	AR.
Buhura.	BENG.
Tit-seim. ?	BURM.
Yehela.	CAN.
Bulla.	DUK.
Belleric myrobalan.	ENG.
Beheyra ?	HIND.
Berda.	MAHR.
Yehela.	"
Tani.	MALEAL.
Beleyleh.	PERS.
Bahira.	SANS.
Booloo-gass.	SINGH.
Tandi maram.	TAM.
Tani kaia maram.	"
Tonda maram.	"
Cattu elupa.	"
Tondi chettu.	TEL.
Tadi chettu.	"
Katthu elupæ.	"
Bahadha.	"
Bahadrha.	"

This very large forest tree has a straight trunk and a spreading head: the flowers have an offensive smell. It grows, says Dr. Stewart, in the Siwalik hills, up to the Indus and north of Peshawar. Its wood there is yellowish, coarse-grained and liable to be eaten by white-ants. In Kumaon, it is a large handsome tree yielding logs of yellowish white timber of 30 to 40 feet and 6 to 7 feet in girth, moderately durable and used in house carpentry. It grows in Ceylon, up to an elevation of 2,000 feet, on the open grassy plains, and it is found in the peninsula of India and in Pegu. In Coimbatore, the tree is not uncommon in the Walliar jungles, but is considered of no value there. The wood is white and soft and though said by Dr. Roxburgh to be durable, it is not much used in that district. It is, however, conjectured by Dr. Wight that a large tree, of the same vernacular name occurs in Malabar. This other tree is hollowed out for canoes, which however are said not to be lasting, and is perhaps the T. Berryi, which also attains a large size and is more nearly allied to the Karri murdah (Terminalia glabra ?) as belonging to the same section of the genus. In the Bombay presidency, this is one of the largest and finest looking trees in the forest

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and is found abundantly both in all the inland and the coast jungles, but although straight, and of great scantling, it is quite useless as a building timber, being immediately attacked by worms. Dr. Gibson, writing on the timber trees of Canara and Sunda, and noticing Taree Mura, *Can.* Yehela, *Mahr.* Terminalia bellerica, observes that it is common both above and below, and is one of the greatest trees in the forest. Wood serviceable for houses, but not first rate; used also for plank. In Ganjam and Goomsur it is said by Captain Macdonald to be a tolerably common tree; it attains an extreme height of 50 feet, and from the ground to the intersection of the first branch, is 10 feet. The wood is said to be of no use there, but its fruit is used medicinally. It is common, Dr. Brandis tells us, throughout British Burmah, but the wood is not used. A cubic foot weighs lbs. 40, in a full-grown tree on good soil, there, the average length of the trunk to the first branch is 80 feet, and average girth measured at 6 feet from the ground is 12 feet. Dr. McClelland says that in the Pegu, Tounghoo and Tharawaddy forests, it is a large timber tree with a white coloured wood, and would answer for all purposes of house-building. Mr. Fergusson says that in Ceylon, its wood is used for coffee casks, packing cases, catamarans and grain measures.—*Drs. Wight, Gibson, Brandis, McClelland, Cleghorn and Stewart, Captain Macdonald, Voigt, Mr. R. Thompson.* (*Note.*—Particular attention seems desirable to ascertain the character of this wood.)

TERMINALIA BERRYI, *W. & A.*

Pentaptera augustifolia, *Roxb.*

Vellay murdah wood. ANGLO-TAM.	Vellai marudu. TAM.
	Vallay murdah maram. ,,

This is a tree of the peninsula of India, which attains a very large size, especially at the foot of the western ghats, where it is used for canoes. It is not indigenous in the Bombay forests, and has been introduced into Coimbatore. The bark is quite smooth and nearly as green as the leaves. The wood is white, described as of ordinary quality, but is used on the Malabar coast for canoes and for making the broad wooden platters in use among fishermen and ship lascars.—*Drs. Wight, Gibson, Voigt.* (*Note.*—This is the same as T. arjuna ?)

TERMINALIA BIALATA, *Wall.*

Pentaptera bialata. *Roxb.*

Lein. BURM.

A tree of the mountainous parts of India, common in British Burmah and growing in Martaban, but the wood is not used. A cubic foot weighs lbs. 39. In a full-grown tree on good soil the average length of the trunk to the first branch is 80 feet, and average girth measured at 6 feet from the ground is 12 feet.—*Voigt, Dr. Brandis, Cal. Cat. Ex.* 1862. (*Note*—Major Beddome considers this to be identical with T. tomentosa.

TERMINALIA CATAPPA, *Linn.; Roxb.; W. & A.; Rheede.*

Terminalia Moluccana, *Lam.*
Terminalia myrobalana, *Roth.*
Terminalia subcordata, *Willd.*
Terminalia intermedia, *Spr.*
Juglans catappa, *Lour.*

Badam. BENG. DUK.	Catappa. MALAY.
Indian almond tree. ENG.	Ada maram. MALEAL.
Country almond tree. ,,	Ingudi. SANS.
Bengal almond tree. ,,	Nattu vadom maram. TAM.
Badami. HIND.	Vadom chettu. TEL.
Jungli Badam. ,,	Badam chettu. ,,
Bengali badam. MAHR.	Badama ,, ,,

The fruit.

Badam-i-hindi. DUK.	Natta vadom cottay. TAM.
Hinghudie. SANS.	Badome vittulu. TEL.

A beautiful tree, common in the gardens of Europeans and Natives, of the Madras and Bombay presidencies. It attains a large size in Malabar, where the wood is much esteemed, and in the forests of the Godavery, it is said to be very strong. Dr. Gibson, however, says that the wood does not appear to him to be of average quality or fit either for public or domestic purposes, except as firewood. The English in India call it the Indian almond tree with reference to the oval and flattened shape of its fruit. The kernel, however, is cylindrical, it is eaten and palatable. Mr. Latham says, in Nalla mallai, it is a serviceable wood chiefly used as posts. Its colour is yellowish brown and it has a close grain. Captain Beddome says that as it occurs in the forests of the Godavery, the wood is very strong, and Dr. Voigt says the wood is good.—*Useful Plants, Voigt, Drs. Gibson. Wight and Cleghorn, Captain Beddome.*

TERMINALIA CHEBULA, *Retz.; W. & A.; Roxb.*

Terminalia reticulata, *Roth. in Useful Plants.*
Terminalia myrobalanus citrina, *Kon in do*

Heliji Kabule. AR.	Umbed her. ? HIND.
Hari tuki. BENG.	Hurr of Kumaon.
Kya zu ? BURM.	Hyrah of ,,
Kayubin ? ,,	Heerda. MAHR.
Pang ah ? ,,	Heari. ,,
Pilla-marrada. CAN.	Kodorka maram. MALEAL.
Alali mara. ,,	Heliloh-i-kalan. PERS.
Alli mara. ,,	Haritaka. SANS.
Allibi kai mara. ,,	Aralu-gase. SINGH.
Hirda. DUK. ,,	Pilla murda. TAM.
Huldah. ,,	Kadukai maram. ,,
Pilla murda wood. ANGLO-CAN.	Karaka chettu. ,,
Hordah. GOND.	Karakain chettu. ,,
Har. HIND.	I arakata sringi. ,,
Hara. ,,	Koreda. ,,

This tree grows in Ceylon, in both the peninsulas of India and northwards to Nepaul, and everywhere is a large tree. In Ceylon its wood is dark coloured, heavy and hard. Its heart-wood is used for superior furniture, but is cross-grained and difficult to work. In Coimbatore, it is of gigantic size, furnishing planks three feet broad. There, its wood is of a dark colour, heavy and hard, sustaining a weight of about lbs. 400, but is very cross-grained, and difficult to work. In Canara and Sunda, it abounds above the ghats, and the wood it yields is of average quality for houses. In the Bombay jungles it is more rare than on high table land on and near the ghats. The wood there, also, is strong and rather hard, but on that side of India it does not reach any great size, and is generally gnarled, owing to the exposed situations in which it grows. Also, Dr. Gibson is of opinion that in describing it as a most gigantic tree, Dr. Wight must have confounded the wood of Terminalia bellerica with that of this tree. Captain Beddome says its timber from the Godavery is very hard. In Ganjam and Goomsur, where it is tolerably plentiful, its extreme height is 45 feet, circumference 4½ feet, and its height from the ground to the intersection of the first branch is 20 feet, and it is employed for the beams and rafters of houses, but chiefly for firewood, on account of its abundance. On the Godavery it is said to yield a very hard valuable timber. In Nagpore, according to Captain Sankey, the average size of its timber is 16 feet with a girth of 4½ feet, and it sells there at 5¼ annas per cubic foot. There, the Hurda has a yellowish coloured wood which becomes very dark on the outside in the process of seasoning, it is attacked by white ants, and is inferior in strength to teak, appears to have but little essential oil, and is said to be very subject to dry rot. Its value is principally from the ease with which it works. It grows to be a large tree in the Siwalik tract up to the Peshawur valley. The wood is yellowish, hard and heavy, and it is used for agricultural implements, but is not valued. According to Dr. McClelland, in Pegu, it is a large timber tree, plentiful throughout the teak forests, and yielding wood of a red colour, strong, adapted for house-building. Dr. Brandis adds that it is common on the hills of British Burmah, and gives a valuable wood, used for yokes and canoes, the heart-wood being yellowish brown. A cubic foot weighs lbs. 53. In Pegu, in a full-grown tree on good soil the average length of the trunk to the first branch is 80 feet, and the average girth measured at 6 feet from the ground is 12 feet. It sells there at 12 annas per cubic foot. Dr. Cleghorn says that when used in Southern India as sleepers for railways, it appears to be liable both to the attacks of fungi and of the carpenter bee. Its fruit is used by tanners. The leaves are punctured by an insect, and hollow galls are developed, which are powerfully astringent, and answer well for tanning and making ink. They also yield, for chintz painters and carpet weavers, their best and most durable yellow. (Roxb.) The fruit which is largely exported is well known for its dyeing properties, yielding also a black dye, and is substituted for gall nuts. It is also used medicinally. The astringent bark is also said to be employed in tanning. The fruit and galls are used by dyers and harness makers: with alum they give a durable yellow, with ferruginous mud, an excellent black, and they make useful ink. The unripe fruit are known as black, yellow and chebulic (*Kabuli*) myrobalans from their colours, which vary so, according to age.—*Drs. Gibson, Wight, McClelland, Voigt, Stewart, and Brandis, Captains Macdonald, Beddome and Sankey, Messrs. Latham and Thompson, Thwaites.*

TERMINALIA CHEBULA.

Hurr. HYRAH.

In Kumaon, a small tree with timber more durable than that of T. bellerica.—*Mr. R. Thompson.*

TERMINALIA CITRINA, *Roxb.?*

Myrobalanus citrina, *Gertn*, | Huri tuki. BENG.

A very large and tall timber tree of Assam and the Khassya hills. The wood is very hard and shunned by insects. The fruit is used as that of T. chebula.—*Voigt, Roxb., Fl. Ind., Vol. II, p. 436.*

TERMINALIA CORIACEA, *W. & A.*

Pentaptera coriacea, *Roxb.*

Mairthee.	CAN.	Aeen.	MAHR.
Muddi.	,,	Arremuti maram.	TAM.
Muttee.	,,	Karra maradu.	,,
Ayni.	,, of N. Can.		

A large tree of the peninsula of India, and very common in Malabar, both above and below the ghauts. The wood, there, is very durable, and is used in house, ship and boat-building. In Canara and Sunda, it is the most common tree in the large jungles both above and below the ghats, and is there used for beams and pillars for houses: also for ships and boats. The heart wood is one of the most durable known. It seems to be this tree to which Dr. Gibson alludes when he mentions that it has small dull yellow flowers, that its wood is strong, hard and heavy, and made into solid wheels for buffalo carts, and that several of the forest revenue officers have expressed their opinion that the exporting of Aeen for "keeta" or firewood, should be prohibited. It is employed by the Telegraph department for posts, along with sal and teak. It is a valuable, well known timber tree of the Godavery forests.—*Drs. Gibson and Cleghorn, Forests and Gardens, p. 267, Voigt, p. 38, Captain Beddome.* (*Note*—The Aeen or Aynl of Malabar, is the

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Artocarpus hirsuta. Major Beddome considers this to be identical with T. tomentosa.)

TERMINALIA GANGETICA, *Roxb.*

A tree of the banks of the Ganges.—*Roxb., Vol. II, p.* 437.

TERMINALIA GLABRA, *W. & A.*

Terminalia crenulata, *D. C.* ?
Pentaptera glabra, *Roxb.*
" obovata, *D. C.*

Took kyan. BURM.
Curry murdah wood. ANGLO-TAM.
Aeon?? MAHR.
Mairthee ?? MAHR.
Saj, Sein, Assein. "
Koombook-gass. SINGH.
Marutha Tam. of Ceylon.
Karai marudu maram. TAM.
Nalla maddi chettu. TEL.
Sahajo. URIA.

A valuable timber tree with a large and lofty trunk, a native of Sylhet, Monghyr, it occurs in the eastern Pallee Dhoon, and as a gigantic tree in eastern Dehra Dhoon and in the valley of the Ganges. It grows throughout the peninsula of India, south to Ceylon, where it is very abundant up to an elevation of 2,000 feet. It is a large tree in Coimbatore, and is found abundantly in all the coast jungles of the Bombay Presidency, as also in those above the ghauts. The wood is dark coloured, very hard, heavy and strong, inch bars bearing from 430 to 450 lbs., and in 1850, large beams of it were, readily procurable for house-building, for which and many other purposes it is valuable. It is a good wood for trenails, but they should have a second seasoning after they are manufactured, as there is a material shrinking immediately after the piece has been cut out of the log and shaped and their ends should be dipped in tar to preserve them. According to Captain Macdonald, in Ganjam and Goomsur, its extreme height is 60 feet, circumference 1½ feet and height from the ground to the intersection of the first branch, 30 feet : it is one of the commonest trees in those jungles, cattle sheds are sometimes floored with it, and rice-pounders are also said to be occasionally made of it ; it is extensively used for firewood and in making potash. The bark is used for tanning.—*Drs. Wight, Cleghorn and Gibson, Voigt, Thwaites, Captains Beddome and Macdonald, Mr. Latham.* (*Note*—Major Beddome considers this to be identical with T. tomentosa.)

TERMINALIA MACROCARPA, *Brandis.*

Htouk-gyan. BURM.

One of the largest trees in Pegu, and very common ; the stems are of very regular shape ; heartwood dark-brown, and used for house posts and planking. A cubic foot weighs lbs. 58. In a full-grown tree on good soil, the average length of the trunk to the first branch is 80 feet, and average girth measured at 6 feet from the ground is 12 feet.—*Dr. Brandis, Cal. Cat. Ex.* 1862.

TERMINALIA MOLUCCANA, *Willd.*

Kala drooma. SANS.

A native of the mountainous countries of the N. E. of Bengal.—*Roxb. F. I. v. II, p.* 453.

TERMINALIA PANICULATA, *W. & A.*

Pentaptera paniculata, *Roxb.; Fl. Ind.* 2, *p.* 462.

Mardah. TAM.
Maddee. TEL.

A tree of Malabar and the Circars, of the valleys of the Concan rivers near their sources, at Courtallum and abundant in the jungles south-east of Surat. Its timber is good.—*Voigt, Roxb.*

TERMINALIA PARVIFLORA, *Thw.*

Combretum decandrum. ?
Hampalanda-gass. SINGH.

In Ceylon, this tree is found on the margins of woods in the central provinces, up to an elevation of 4,000 feet, and abundant in the Ambagamowa district, wood hard and heavy.—*Thw. En. Pl. Zeyl., p.* 103, *Mr. Fergusson.*

TERMINALIA PROCERA, *Roxb.*

A large tree of the Andaman islands, a charming species.—*Roxb. Fl. Ind., Vol. II, p.* 429.

TERMINALIA RUBRICA ?

Beleyleh. AR.
Buhira. BENG.
Vibbituka SANS.
Taudra maram. TAM.
Tundi. TEL.
Tani of Rheede.

TERMINALIA TOMENTOSA, *W. & A.*

Pentaptera tomentosa, *Roxb. Fl. Ind.*

Ashan. BENG.
Aans ?? "
Piya-shal. BENG.
Mairthee. CAN.
Madi. "
Mutte. "
Karrai mutti. CAN.
Ayni of N. Can. ?
Piasal. DUK.
Asan. DUK. HIND. PANJ.
Eyne. HIND. of Nagpore.
Eyn. MAHR.
Saj. " of Nagpore.
Sein. PANJAB.
Maradu maram. TAM.
Carru maradu. "
Arre-mutte. " ?
Nalla maddi. TEL.

Grows in the Siwalik hills, west to the Ravi. It occupies a large proportion of the forest lands of Kumaon and Gurhwal, in the low ranges and warm valleys of the Doon and hill forests. Its dark-brown timber, when seasoned is said to make good beams and rafters, but it splits if in planks. Logs 50 feet long and 6 or 7 feet in mid girth are obtainable in the Kumaon forests. It grows in the Central Provinces, common in the ghauts of the Malabar coast, grows in the Concans, and at Monghir, Rajmahal and Oude, grows in abundance in the Nalla mallai and is a well known valuable timber in the forests of the Godavery. In the Madras Presidency, it is used for house-building, it bears a good transverse strain and is a wood much esteemed for all railway purposes. The Asan tree of Lucknow grows spontaneously in the Taraee jungles, and its wood is, there, considered durable and elastic and, for many purposes, preferable to sal. Writing of it as it occurs in Nagpore, Captain Sankey says, that like Bejasar this

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timber has white wood surrounding the body and heart, which is of a blackish colour; the ring however in this case does not exceed 1½ inch in breadth. The dark wood is exceedingly heavy, being exactly of the same weight as water, and has a much more winding grain than Bejasar. In strength it is far superior to all its forest congeners, and from the strength given by Barlow for American teak, it even appears to excel that celebrated timber. Unfortunately, he adds, its length, in Nagpore is limited, seldom furnishing more than a 20 feet tie beam, from the crooked manner in which the tree grows. It is a difficult timber to work up, splits freely when in exposed situations, and by all accounts is very subject to dry rot. Were the latter defect over-come by the steeping process, and the former guarded against, he knows of no timber which can bear a comparison with it; for the joists of a terraced roof it would be invaluable. White ants will not attack it. He ranks it both as a tie beam and rafter wood. He says that, in Nagpore, its average length is 18 feet, and average girth 4½ feet, and the maxima 28 to 24 feet, and its selling price 5 annas the cubic foot.—*Captains Sankey and Beddome, Voigt, Cal. Cat. Ex.* 1862, *Mr. Thompson.* (*Note*—Major Beddome considers T. glabra, *W. & A.*; T. coriacea, *W. & A.*, and T. bialata, *Wall.* to be identical with T. tomentosa.)

TERMINALIA VIOLATA, *McClelland.*

Lai-bwai. Burm.

A large timber tree, plentiful throughout the Pegu, Tonghoo and Tharawaddy forests. Wood of a white colour and well suited for all purposes of house-building.—*McClelland.*

TERNSTRŒMIA, *Species.*

Puzzeen zwa. Burm.

A large tree of Tavoy, used in building.—*Dr. Wallich.*

TERRUWALI. Can.? A wood of S. Canara, used for building purposes.—*Madras Cat. Ex.* 1852.

TERU-KUNDLE, the Tamil name of a tree which grows to about two feet in diameter, and twelve feet in height. It is used in country vessels, and produces a fruit which is eaten by the natives.—*Edye on the Timber of Ceylon.*

TETRAMELES NUDIFLORA, *R. Br. W. Ic.*

Jungle Bendy of Bombay. | Weenong of Java.

A large tree of Ceylon.—*Thw.*, quoted by *Mr. Fergusson.*

TETRANTHERA. A genus of plants, belonging to the Lauraceæ.

T. apetala, Roxb.

Kukoor chita. Beng. | Kutmurrah. Hind.
Myda lakri. Hind.

A tree of peninsular India, Kumaon and Gurhwal, Bengal and Assam, and of the northern part of New Holland. Wood white, moderately hard, fine-grained and durable.—*Dr. Voigt, Mr. Thompson.*

T. Gardneri, Thw. A tree 40 to 50 feet high of the central province of Ceylon, at an elevation of 4,000 to 6,000 feet. Wood used as timber.

T. glaberrima, Thw., a small Ceylon tree, at 4,000 feet elevation.

T. longifolia, T. ligustrina, T. iteodaphne, are small or moderate-sized trees of Ceylon, yielding timber: T. nemoralis and T. ovalifolia also of Ceylon, the last a timber tree 30 to 40 feet high.

T. monopetala.

Buro kukur chettu. Beng. | Jangli Rai Am. Hind.
Nara chettu. Tel.

A small-sized tree in Kumaon and Gurhwal forests, with a trunk of 12 and girth of 3 feet. Wood white, moderately hard, fine-grained and durable.—*Voigt, Roxb., Thwaites, Messrs. Thompson and Fergusson.*

TETRANTHERA NITIDA, *Roxb.*

A useful timber tree which grows in Assam, in the Garrow hills, from which canoes full fifty feet long are made.—*Voigt.*

TETRANTHERA ROXBURGHII.

Maidá. Chándni. Hind. | Bo-mee-gass. Singh.

A tree of the Panjab, the peninsula and Ceylon, where its timber is extensively used for planks and rafters. The bark is called "maidasak" in native pharmacopœia.—*Messrs. Fergusson, Thompson, Thwaites.*

THAB BAN. Burm. This Amherst timber is used for boat-building and making carts; timber sometimes 70 feet long: it is a teak, but rather heavier than the usual kind. Specific gravity 0·814.— *Cat. Ex.* 1851.

THA BHAN. A timber of Tavoy used for canoes.—*Mr. Blundell.*

THAB-IA KING? A tree of Akyab, but not plentiful. It is a large wood, but not much in use.—*Cal. Cat. Ex.* 1862.

THA BONG PEW. Burm. A timber tree, of maximum girth 2 cubits and maximum length 15 feet, abundant on the sea-coast from Amherst to Mergui. When seasoned it floats in water. It is liable to attacks from worm, rots readily, and is a brittle inferior wood.—*Captain Dance.*

THA-BOTE-KEE. Burm. A Tenasserim timber tree, of maximum girth 3 cubits, and maximum length 18 feet. Scarce, but

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found all over the province near the sea and at the mouths of rivers. When seasoned it floats in water. It is a short fibred, brittle, yet soft wood, and not durable.—*Captain Dance.*

THA-BWOT-GYEE. BURM In Amherst a good heavy valuable timber, somewhat like iron wood.—*Cat. Ex.* 1851.

THA-BYA? A tree of Akyab, which grows to a large size, and is plentiful. It is sometimes used for planking.—*Cal. Cat. Ex.* 1862.

THA BYAY-NEE. BURM. In Tavoy, a strong, close-grained, brownish-grey wood; used for house-posts.—*Mr. Blundell in Cat. Ex.* 1851.

THA BYAY-NEE, BURM. In Amherst, Tavoy and Mergui, of maximum girth 3 cubits, maximum length 23 feet, found very abundant all over the Tenasserim and Martaban provinces, when seasoned it floats in water. It is an inferior brittle wood, used by Burmese in short pieces for the props of houses.—*Captain Dance.*

THA BYA NEE, BURM.
Red jambo. ENG.

A tree of Moulmein, used for building materials.—*Cal. Cat. Ex.* 1862. (*Note.*—Are the last four woods identical?)

THA-BYION. In Amherst, a useful timber, probably a Eugenia.—*Dr. Wallich.*

THA-BYAY-YNET-GHEE, BURM., meaning with large leaves. A tree of maximum girth 3 cubits, maximum length 22 feet, widely scattered inland, all over the provinces of Amherst, Tavoy and Mergui. When seasoned it floats in water. It is a tolerably good and tough wood, and is spoken of by Dr. McClelland as a strong and close-grained timber.—*Captain Dance.*

THA-BY-KE OR THA-BAY-KYA, BURM. Described as a kind of oak growing in Amherst, Tavoy and Mergui, of maximum girth 1½ cubits, and maximum length 16 feet. Not abundant, but scattered in all inland forests, all over the provinces. When seasoned, it floats in water. It is a sufficiently light, yet durable, straight-grained, tough wood: used by Burmese for posts, building purposes generally, and various other objects. This wood is recommended as likely to prove excellent for helves, and if it could be procured in sufficient quantities, would be unrivalled for shot boxes.—*Captain Dance.*

THA-DOOP? A plentiful tree of Akyab, furnishing a small wood, but not much in use. —*Cal. Cat. Ex.* 1862.

THA-KHWOT. This Amherst wood is useful for sandals; it is a kind of white teak. *Cat. Ex.* 1851.

THAMMAI. A native of Amherst, a strong, handsome wood, like Ægiceras, or Amherst box-wood.—*Cat. Ex.* 1862.

THA-KHOOT, BURM. A tree of Moulmein, wood is used in ordinary house-building.—*Cal. Cat. Ex.* 1862.

THA-MAN-THA, BURM. A tree of Moulmein, wood used as an ordinary building material.—*Cal. Cat. Ex.* 1862.

THANDRAIKYA, TEL. In the Nalla Mallai, an ash coloured wood, resembles hickory in fibre, is close and tough, and would be a very useful wood.—*Mr. Latham.*

THA-NAT-KHEE, BURM. A timber tree of Amherst, Tavoy and Mergui, of maximum girth 3½ cubits, and maximum length 30 feet. Said to be abundant all over the provinces, but has not been easily obtained in Moulmein. When seasoned, it floats in water. It is a durable, yet light wood with a very straight grain; used for every purpose by the Burmese, and much recommended for helves.—*Captain Dance.*

THA-NAT. In Amherst, is a kind of grey teak.

THA-NAT-THAYT-PEW-THA, BURM. A very abundant timber tree in Amherst, Tavoy and Mergui, of maximum girth 2 cubits, and maximum length 15 feet.—*Captain Dance.*

THAN-KYA, BURM. A native of Amherst, the fruit of this tree is employed for ringworm. The wood is like that of the Saul, Shorea robusta.

THANNA-DAN, BURM. A native of Amherst, and said to be a fruit tree; it has a reddish-brown, heavy wood, fit for machinery or other purposes requiring great strength; it is totally exempt from attacks of insects, but somewhat liable to split.—*Cat. Ex.* 1851.

THAN-THAT, BURM. Very difficult to procure, but found inland up the Gyne and Attaran rivers, in the Tenasserim provinces. When seasoned it floats in water. It is a capital wood, very durable; used by Karens for bows, for shoulder yokes, spear handles and many other purposes. Excellent for hammer handles from its tough fibre.—*Captain Dance.*

THAN-THAT. An Amherst wood, used for stocks of various instruments; it is a capital wood, and seems to be a kind of Saul. —*Cat Ex.* 1851.

THAN-THAT-GYEE, BURM. A tree of Moulmein; used for building materials.—*Cal. Cat. Ex.* 1862.

THA-PYKE-THA, BURM. A tree of Amherst, Tavoy and Mergui, of maximum girth 5 cubits, and maximum length 30 feet. It is very abundant along the banks of rivers, all over the provinces. When seasoned, it floats in water. It is a wood of no durability.—*Captain Dance.*

THARANCHILLY, Tam. A Travancore wood of a bamboo colour, 5 to 8 feet in circumference ; used for canoes only.—*Colonel Frith.*

THARANJULLA, Tam. A Travancore wood of a bamboo colour, sp. gravity 0·576 ; used for common building.—*Col. Frith.*

THAU-BAUN-PO, Burm. A wood of Tavoy, an inferior wood, used for common canoes.—*Mr Blundell.*

THAU-GAET-THIT-TOO, Burm. An inferior wood of Tavoy.—*Mr. Blundell.*

THA-YAY-BEW, Burm. Maximum girth 2 cubits, and maximum length 20 feet. Not very abundant, but found inland all over the provinces of Amherst, Tavoy and Mergui. When seasoned, it floats in water. It is not a durable wood.—*Captain Dance.*

THA-YIN-GEE, Burm. A small tree of Amherst, Tavoy and Mergui, of maximum girth ½ cubit, and maximum length 6 feet. Abundant all over the provinces. When seasoned it floats in water. It is utterly useless except for firewood.—*Captain Dance.*

THAY-KYA-BA, Burm. In Amherst, Tavoy and Mergui, of maximum girth 3 cubits, and maximum length 24 feet, very abundant, but straggling inland all over the provinces. When seasoned, it floats in water. It is used for house posts, but is not a durable wood.—*Captain Dance.*

THAY-THA, Burm. In Amherst, Tavoy and Mergui, of maximum girth 3 cubits, and maximum length 22 feet, widely scattered inland all over the provinces. When seasoned, it floats in water. It is a tolerably good and tough wood, liable to rot in store, and therefore not recommended.—*Captain Dance.*

THAY-YO-THA, Burm. In Amherst, Tavoy and Mergui, of maximum girth 5 cubits, and maximum length 25 feet. Very abundant all over the Tenasserim and Martaban provinces. When seasoned, it floats in water. It is a useless wood ; rots very quickly, and is only used for temporary buildings. *Captain Dance.*

THAYET-KYA, Burm. A Tenasserim wood, of maximum girth 2 cubits, and maximum length 20 feet. Not very abundant, but occasionally procurable inland near the back of hills near Moulmein and here and there all over the provinces. When seasoned, it floats in water. It is durable and light, and a good wood for helves.—*Captain Dance.*

THEE KHYA THA. A timber of maximum girth 1 cubit, and maximum length 12 feet. Very abundant all over the Tenasserim and Martaban provinces, in Amherst, Tavoy and Mergui : when seasoned, it floats in water. It is a very crooked-grained perishable wood ; and not recommended.—*Captain Dance.*

THE-LA-BAY, Burm. A timber tree of Amherst, Tavoy and Mergui, of maximum girth 3 cubits, and maximum length 20 feet. Not very abundant, but obtained from Tavoy, Mergui and Yea. When seasoned it floats in water. It is a brittle wood, useless for ordnance purposes, though employed by Burmese for house posts and to support the shafts of wells.—*Captain Dance.*

THEET-PHYIOU. This is a native of Amherst, it resembles Acacia serissa ; it is a useful white wood, is used for fan handles, and would answer for common carpentry.—*Cat. Ex.* 1851.

THEET-TA-GYEE. A Tavoy wood, suitable for common carpentry—*Mr. Blundell.*

THEET-TO. This is a native of Amherst, is said to be a fruit tree ; it is a dark-brownish grey, hard, heavy wood, and employed in boat-building, making carts, &c.—*Cat. Ex.* 1851.

THEET-YA-HAN. In Tavoy, a close-grained teak, used for posts.—*Mr. Blundell.*

THEET-YA-NEE. In Tavoy, a close-grained brown wood ; rather shaky.—*Mr. Blundell.*

THEET-YA. In Amherst, employed for rice-grinders or pounders. It is a superior, compact, close, tough, brown wood, fit for anything requiring great strength and durability. —*Cat. Ex.* 1851.

THEET-YA-PYIOU. A heavy strong wood of Tavoy.—*Mr. Blundell.*

THEIM, Burm. ? A timber of Amherst, used as house-posts, rafters and general purposes of carpentry.—*Cat. Ex.* 1851.

THEM-MAI-THA, Burm. A very abundant wood, found all over the provinces of Amherst, Tavoy and Mergui, on both sides of the Moulmein river and on the sea-coast. Its maximum length is 12 feet and maximum girth 2¼ cubits ; and, when seasoned, it floats in water. It burns with an intense heat, and is therefore used in preparing salt ; it is recommended as an excellent wood for fuel for steamers, and probably would be a good charcoal wood.—*Capt. Dance.*

THENG-GAN, Burm. This wood, a native of Amherst, is employed for house-posts, carts, boat-building, paddles and oars. It is an excellent compact wood, fit for gun carriages.—*Cat. Ex.* 1851.

THESPESIA POPULNEA, *Lam.; W. Ic.; W. & A.*

Hibiscus populneus, *Roxb.*
Malaviscus populneus, *Gærtn.*

Poresh. BEN.
Poo-arasoo. CAN.
Paras pipal. DUK.
Tulip tree. ENG.
Portia tree. „
Bendi. MAHR.
Surya-gass. SINGH.
Pursa maram. TAM.
Pursung kai maram. TAM.
Puvarasa maram. „
Gangaravi. TEL.
Muni gangaravi. „
Gangaravi wood tree. ANGLO-TEL.

This tree is generally met with in Ceylon and in Southern India, in avenues, or lining roads, but is in most abundance near the sea. It is of quick growth and yields a good shade, but is inconvenient on road sides and in gardens from the quantities of leaves it sheds, and the numerous large flowers which fall. It is commonly planted from cuttings, from which cause, perhaps, it is often hollow in the centre. It yields, when ripe, very strong, hard, tough and durable timber, with a colour like mahogany; but, its use is limited from the difficulty of gesting it of large size. It is used for chairs and gun-stocks in Madras. In Ceylon, for felloes, naves, panels of carriages and gun-stocks. On the Bombay side, where it is found only near the coasts, it is much used in the construction of cart wheel-spokes, and for the timbers of native boats. The shoots are also in extensive use there, as rafters for houses, and at all times fetch a good price when sold for that purpose. The Bombay Government formed two plantations of this tree at Sakuria in Alibagh, at Sat Tar, and in Colaba. Those at Sat Tar not favourable, but the trees growing in the alluvial soil of Sakuria, were said to be in a good state. Dr. Gibson tells us, that the increasing scarcity of this tree is such that sometime ago wheel-spokes were being paid for by the gun-carriage department at 12 annas each. There are a pretty large number of these trees within the precincts of many of the cultivators' villages in the Concan, but these are mostly reserved for the supply of choice rafters, afforded by the straight shoots of the tree while the stem is most frequently hollow; and therefore the ripe-wood, or such of it as remains, is worthless for ordnance purposes. Dr. Gibson imported some years ago, a number of these trees which were rejected by the Arsenal by reason of this hollowness. Nevertheless, he cut up a few by way of experiment, and found that many available spokes of wheels might have been turned out from them. As it is, they were sold as rejected materials, and the price realised just sufficed to cover charges. Dr. Gibson has noticed the value of this tree for years, but though of rapid growth its wood is not in much use.—*Voigt, Drs. Wight, Gibson and Cleghorn, Captain Beddome, Thwaites, Mr. Fergusson.*

THEW-GA-NET, (Tilsa ?) A tree of Akyab. A very good wood, used for work of all kinds. Grows to a large size, and is very plentiful in the Akyab and Ramree districts.—*Cal. Cat. Ex.* 1892.

THEP-YENG, BURM. This, a native of Amherst, is said to be a fruit tree: the trunk affords a compact, fine-grained wood.—*Cat. Ex.* 1851.

THET LENDAH, BURM. A tree of Moulmein, used for all ordinary building purposes.—*Cal. Cat. Ex.* 1862.

THEVAHDARUM, TAM. Or cedar wood, a timber of Travancore. Wood of a flesh colour, specific gravity 0·457, 2 to 8 feet in circumference, and used for palanquins, cabin fittings, furniture, &c.—*Colonel Frith.*

THEVETIA NERIIFOLIA, *Juss.*

Cerbera thevetii, *Linn.* | C. thevetis, *Don. Mill.*
Exile tree. ENG.

A garden shrub of Madras, called the "Exile." The wood said to be worthless.—*Cat. Madras Gardens.*

THE-YAH, BURM. An inferior wood of Tavoy.—*Mr. Blundell.*

THIEM, BURM. A serviceable wood of Tavoy.

THIET-NEE, BURM. A tree of Moulmein; wood converted into boxes, tables, &c. &c.—*Cal. Cat. Ex.* 1862.

THING ? A tree of Akyab, which grows to a large size, and is very plentiful. Wood used in house-building.—*Cal. Cat. Ex.* 1862.

THIN-GAN-KY-AUP, BURM. A Tavoy wood, a close-grained, heavy, strong-wood, used in ship and house-building, for carts, &c.—*Mr. Blundell.*

THIN-WIN, BURM. A tree of Moulmein. Root used medicinally—*Cal. Cat. Ex.* 1862.

THIT-NEE, BURM. A beautiful, red, but heavy wood, of British Burmah. A cubic foot weighs lbs. 80. In a full-grown tree on good soil, the average length of the timber to the first branch is 50 feet, and average girth measured at 6 feet from the ground is 8 feet. It sells at 12 annas per cubic foot.—*Dr. Brandis, Cal. Cat. Ex.* 1862.

THIT-POUK, BURM. One of the Leguminosæ, a light wood of British Burmah, not much used. A cubic foot weighs lbs. 35: in a full grown tree on good soil, the average length of the trunk to the first branch is 20 feet, and average girth measured at 6 feet from the ground is 4 feet. It sells at 8 annas per cubic foot—*Dr. Brandis, Cal. Cat. Ex.* 1862.

THMENG-BA, BURM. A timber of Tavoy, like red Jarool; used for posts and cotton rollers.—*Mr. Blundell.*

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T[illegible]ENY-TSHOUT, Burm. *Qu.?* Thideng-tshout. A small, heavy, coarse, brown wood of Tavoy, used for door frames and boat beams.—*Mr. Blundell.*

THOKAY, Tam. A wood of Tinnevelly, of a red colour, specific gravity 0·950; used for building purposes.—*Colonel Frith.*

THOONGUN. A tree of Akyab. It is plentiful but is a small wood, used for oars and banghies.—*Cal. Cat. Ex.* 1862.

THOTHA-KUTTY, Tam. A wood of Tinnevelly, of a red colour, used for furniture of every description.—*Colonel Frith.* (*Note.*—This seems an illustration of the errors arising from using vernacular names: it means garden-knife?)

THOUN-MYN-GA, Burm. A wood of Tavoy, used in house-building.—*Mr. Blundell.*

THOUNG-THA-LAZ? A tree of Akyab which grows to a large size, but is not by any means plentiful. Its wood is used for oars and sometimes in house-building.—*Cal. Cat. Ex.* 1862.

THUJA DONIANA, *Hooker.*

Dacrydium plumosum, *Don.*
Ka-wa-ka of New Zealand.

Is a tree which attains a height of 60 to 70 feet and is 8 to 10 feet in circumference. It yields a red timber, elegantly grained, close, heavy and of excellent quality, and is used for ornamental purposes.—*Bennett's Gatherings, p.* 415.

THUN-NA-KA, Tam. A wood of Tinnevelly of a whitey-brown colour, used for making trunks.—*Colonel Frith.*

THY? A tree of Akyab, which grows to a large size, and is plentiful in the Ramree and Sandoway districts. Its wood is used for posts and firewood.—*Cal. Cat. Ex.* 1862.

THY-KA-DO? A tree of Akyab, which grows to a large size, but is not very plentiful. It is used for furniture.—*Cal. Cat. Ex.* 1862.

THYM-BRO, Burm. A good strong durable wood of Tavoy, used in boat-building.—*Wall.*

THY-NAN? A tree of Akyab, a small wood used in house-building. It is not very plentiful.—*Cal. Cat. Ex.* 1862.

THY-ZAU-HOONG? A tree of Akyab. It is small and plentiful, and its wood is used for colouring thread.—*Cal. Cat. Ex.* 1862.

TIBELEBU, the name of a tree in Canara and Malabar, also named Nambogum. The wood is close-grained and very durable for general house-building purposes: the carpenters use it generally as a strong durable wood. It may be procured in Malabar and Canara, in quantities, from eight to thirty-six inches in diameter, and from twenty to thirty-five feet long.—*Edye, Forests of Malabar and Canara.*

TIELLA in Malayala and Tamil, a Ceylon tree not much known. It grows from eight to twelve inches in diameter. It is used by the natives in the frames of country boats and, from its strength and durability, is found to answer the purpose well.—*Edye on the Timber of Ceylon.*

TIJA. A Penang wood of a light-brown colour, used for furniture, boxes, &c.—*Col. Frith.*

TIMBER, from Saxon, Timbrian, to build.

Thit'ha.	Burm.
Arunyavu.	Can.
Nath'h.	Duk.
Lakaru.	Guz.
Lakra.	Hind.
Arunuyum.	Maleal.
Lakara.	Mahr.
Aruneya.	,,
Hez'm.	Pers.
Chob.	Pers.
Arunuyum.	Sans.
Davou.	,,
Mad'hri.	Tam.
Chettu.	Tel.
Karra.	,,

In contradistinction to dye-woods, woods for engraving, fancy or ornamental woods, &c, says Tredgold, wood felled and seasoned, and fit for building purposes, is called timber. It is met with in commerce in various forms. Mr. Poole in his statistics of commerce, mentions that the trunk of a tree, with or without boughs or branches undressed, is termed round timber; when hewn into logs, square timber; when quartered, billets; when split, staves and lathwood; when sawn, deals, battens, planks, boards and scantling. The stems or trunks of several kinds of young trees are called spars, poles and rickers; also propwood and postwood. In India, there are peculiar terms applied to timbers of different kinds. Reepers, in southern India, are the split stems of the palmyra tree. Timbers are also sometimes classed according to the purposes to which they are applied: oak, teak, green heart, black mara, are designated ship-building woods; teak, saul, padouk, &c., are recognised ordnance woods; while, Trincomalee rosewoods, blackwoods, red-woods, satin wood, snake woods, mahogany, ebony, kyaboca, zebra, tulip and other furniture woods, are usually called fancy woods: Timbers, says Tredgold, are also spoken of as hard, soft and tough, but there are no established degrees of these qualities, and in defining them he merely says, that a hard wood yields less to a stroke or impression than a soft wood, and that wood is the toughest which combines the greatest degree of strength and flexibility. The timbers of commerce are, also, recognised as from the sap wood or heart wood. Sap wood is that part of the wood next the bark, and the heart wood is near the centre of the bole or st[illegible] Sap wood is softer and generally lighter coloured than heart wood, and is found to decay more rapidly and to be more subject to attacks of insects. The proportion of sap wood varies much in different trees. In many trees, such as those that produce the ebonies of commerce, the line of demarcation between the heart and sap wood is so strongly defined as to arrest attention and permit the application of those two parts of the timber to different economic purposes, and the sap woods and heart woods in such cases, though the products of the same tree, receive in commerce distinct names. In other trees, the change from the sap wood to the heart wood is gradual; but, in all cases, the sap wood preponderates in young trees and the heart wood in the old. Also, he says, according to Buffon and Duhamel, in trees that have not arrived at maturity, the hardness and solidity of the wood are greatest at the heart and decrease towards the sap wood. But, in the mature or perfect tree, the heart wood is nearly uniform while that of a tree on the decline is softer at the centre than it is next the sap wood. Tredgold quotes the opinion of Sir Humphry Davy (Agricultural Chemistry, p. 220, 4th Ed.) that the decline of trees is caused by the decay of the heart wood. And, in India, where vegetable life abounds, the correctness of that opinion can be testified to by every observer. As with the animal world, so with the vegetable creation, trees have the three stages of infancy, maturity and old age, and Tredgold (p. 196) tells us, that the oak and chesnut trees, under favourable circumstances, sometimes attain an age of about 1,000 years, beech, ash and sycamore to half that age. The plain tree, the Chinar of Central Asia, is said to live to a great age. In forestry, therefore, the rule deducible from our knowledge of those principles and facts, as indicated in Tredgold (p. 197), is to fell timber trees when in their maturity. For, if felled too young, there is much sap wood and even the heart wood has not acquired a proper degree of hardness: and such timber cannot be durable. On the other hand, if the tree be not felled, till on the decline, the wood is brittle and devoid of elasticity: is tainted and discoloured and soon decays. The rule therefore is to fell the mature tree, when the quantity of sap wood is small, and the heart wood nearly uniform, hard, compact and durable, but too early is worse than too late. Therefore, for south-eastern Asia, a tabular statement, showing the ages at which its various timber trees reach maturity, is very necessary, though still a desideratum. Dr. Brandis tells us that, in British Burmah, a full-grown teak tree of 9 feet in girth, cannot be supposed to be less than 160 years old, and I have seen it somewhere mentioned that it ought not to be cut for timber under 80 years of age. In Great Britain as Tredgold tells us, (p. 198) oak is never cut for timber under 50, nor above 200 years of age. Dr. Brandis tells us that the strength and density of teak timber vary exceedingly, according to the locality where the tree is grown. The extremes observed in preliminary experiments were, as to weight, lbs. 40 to 50 per cubic foot, and 190 lbs. to 289 lbs. breaking weight. It is now known that the timber of those trees which grow in moist and shady places, is not so good as that which comes from a more exposed situation, nor is it so close, substantial or durable. The preservation of timber naturally arranges itself into the preservation of growing timber, and that of timber when felled. Since the close of the last century, it has been a growing belief that the climate of a country is greatly modified by the scarcity or abundance of its trees and forests. Some years ago, in 1845, I furnished to the Madras Government, a memorandum of all existing information on this subject, and it then became a matter of enquiry at one of the meetings of the British Association. Other writers, since then, have written on the connection between the amount of rainfall and the number of trees in a country, and it is now generally recognised that they do exercise a powerful influence on the climate of the region or district in which they grow. In a tropical country like India, therefore, the preservation of existing trees, and their extension, in arid districts is a matter of much climatic importance. Dr. Cleghorn, in one of his Reports, gives on this point, the following extract of a letter. "The higher sholas clothing the ghauts on both sides are of the utmost importance, and the climate is believed to suffer the greatest detriment from their removal. I would therefore suggest that the high-wooded mountain tops over-hanging the low country (such as Hoolicul) should be preserved with rigid care, the forest there should not be given over to the axe, lest the supplies of water may be injured. It is the opinion of many persons, in which I concur, that the vast clearings which have taken place have had a share in producing the irregularity of the monsoon which has of late years been so much complained of in Coimbatore. In order that the course of the rivulets should be overshadowed with trees, I conceive that the hills should be left clothed to the extent of about half of their height from the top, leaving half of the slope and all the valley below for cultivation; this available portion would far exceed in extent the higher ridges which

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should be considered." Under the Forest Conservancy Act, No. VII, forests above 6,000 feet are forbidden to be cut. It is not, however, merely from legitimate use, that the forests are decreasing :—all the Conservators notice the conflagrations which arise naturally, and are caused by the wild races who, alike in India and in Burmah, effect a clearance by fire, in order to obtain a fresh soil for their temporary cultivation. Dr. Cleghorn, in one of his reports says, that "the forest conflagrations in the Madras Presidency, are of frequent occurrence ; the unextinguished fire of a camp of Binjara, the sparks from the torches or cheroots of travellers, the spontaneous ignition from friction of bamboos, but much more frequently, the wilful burning of grass by the hill tribes, as heather is burnt in Scotland, in order that the ashes of the herbage may nourish the roots of young grass, and thus improve the forage of their cattle are, he says, among the causes of this devastation which extends annually over large tracts. The largest trees skirting the forest suffer more or less from these fires, the saplings are scorched and mutilated and the smaller seedlings perish. If the same spot is again visited by conflagration in the following year, the largest trees which escaped the first time are often consumed."—*Dr. Cleghorn, Madras Conservator's Report, p.* 8, *Tredgold on Carpentry, Balfour on the effect of Trees on the climate of a Country.—See* TABLES APPENDED.

TOBICA WOOD. Tobica kurra, TEL. A wood of North Canara.??

TO-DOORYAN, BURM. Forest Dooryan, ANGLO-BURM. In Amherst, Tavoy and Mergui, a soft, light, useless timber, liable to rot readily. Its maximum girth 3 cubits, and maximum length 18 feet : scarce, but found on the sea-coast of those provinces and adjacent islands : when seasoned it floats in water.—*Captain Dance.*

TO-NUG-GA-GAW ? A tree of Akyab, grows to a large size, and is not very plentiful. Its wood is sometimes used for planks.—*Cal. Cat. Ex.* 1862.

TOON. The timber of the Cedrela toona : this extends over every part of India, and may be seen all along the foot of the Himalaya. The specimens from Nepaul having frequently a sixth part added, Dr. Wallich was induced to call that variety Cedrela hexandra. There is, however, a distinct species, Cedrela serrata, which may be readily recognized by the great length of its racemes of flowers, and may frequently be seen with Sapindus acuminatus growing in the close valleys within the Himalaya.—*Royle's Ill. Him. Bot., p.* 142.—*See* CEDRELA TOONA.

TOPA, HIND.? A tree of Chota Nagpore, with hard grey timber.—*Cal. Cat. Ex.* 1862.

TOUN-KA-TSEET. BURM. One of the Leguminosæ. A tree not uncommon on the hills of British Burmah ; wood used for canoes. A cubic foot weighs lbs. 45, in a full-grown tree on good soil the average length of the trunk to the first branch is 50 feet, and the average girth, measured at 6 feet from the ground is 10 feet.—*Dr. Brandis, Cal. Cat. Ex.* 1862.

TOUNG-MA-YOA. BURM. A tree of Moulmein, wood smooth, and used by the Burmese as a slate or writing board.—*Cal. Cat. Ex.* 1862. (*Note.*—Is it Alstonia scholaris ?)

TOUNG-BHAUT. BURM. In Tavoy, a rough, knotty wood ; used for knife and spear-handles.—*Mr. Blundell.*

TOUNG-BHIEN. BURM. A light, porous wood of Tavoy, used for common carpentry. —*Mr. Blundell.*

TOUNG-BIEN. BURM. In Amherst, a wood used in boat-building and for making carts. It is a strong heavy wood, well adapted for handles of tools, &c. ; it is probably a kind of teak.—*Cat. Ex.* 1851.

TOUNG-BYENG. BURM. In Tavoy a kind of red saul.—*Mr. Blundell.*

TOUNG-BYE-NAY. In Tenasserim, a brittle short-grained wood. Not the mountain jack though similar to it in name, maximum girth 5 cubits. Maximum length, 30 feet. Scarce but found along the banks of rivers all over the provinces. When seasoned it floats in water.—*Captain Dance.*

TOUNG-BYIOU ? A close-grained, brown, shaky wood of Tavoy.

TOUNG-THA-BYIOU ? BURM. In Amherst, used for house-posts ; it is a strong, red, heavy wood, a kind of Acacia.—*Cat. Ex.* 1851.

TOUNG-THAU-GYEE. BURM. In Amherst, a hard compact wood of a dark-brown colour.—*Cat. Ex.* 1851.

TOUNG-THA-KHWA. BURM. In Amherst, this is a capital wood for any purpose ; used for gun-carriages or gun-stocks.—*Cat. Ex.* 1851.

TOUNG-KHA-RAY. BURM. A wood of Tavoy where it is called red Jarool ; used in boat-building.—*Mr. Blundell.*

TOWNI in Tamil, Tanihi mara in Malayala. This Malabar and Canara tree grows to about three and a half feet in diameter, and from thirty to forty-five feet long ; it is of a whitish colour, and is used by the natives for catamarans, canoes, &c. It produces a fruit which the native physicians use as a purgative in cases of fever, &c., the timber is not durable or of much use.—*Edye, Forests of Malabar and Canara.*

TOWN-PI-NE, BURM. In Tavoy, a good wood, used in boat-building.—*Dr. Wallich.*

TOWTAL, the Malayala name of a Malabar and Canara tree, which grows to about two feet in diameter, and thirty feet high. It is remarkably light, but not very durable, and is used by the natives for catamarans, &c. —*Edye, Forests of Malabar and Canara.*

TREE, ENG.

Pohun. ADANG, (Murut) of Borneo.
Shajr. AR.
Nakl. BENG.
Bin. BURM.
Pin. ,,
Puhn. BISAYA, LANUN, MALAY, SUMATRAN.
Ghidayau? CAN.
Mara? ,,
J'har. DUK. HIND. MAHR.
J'hara. GUZ.
J'hada. ,,
Guas. IDAAN of Borneo.
Keioh. KAYAN ,,
Pokoh. MALAY of Borneo.
Mara. MALEAL.
Akak kaya. MALU of Borneo.
Basoh. MILANAU ,,
Karing. PAKATAN ,,
Darakht. PERS.
Vrukchum. SANS.
Pohn. SEA-DYAK of Borneo.
Gass. SINGH.
Maram. TAM.
Cherri. ,,
Chettu. TEL.
Manu. ,,

—*St. John's Forests, &c.*

TROPHIS ASPERA, *Retz.*

Achymus asper, Soland., *MSS.*
Epicarpurus orientalis, *W. Ic.*
Streblus asper, *Lour.*

Shoora. BENG.
Shasa-gach'h. BENG.
Kurrera. MAHR.
Da-hya of Panjab.
Gaota-nitul. SINGH.
Sahadra. URIA.? TEL.?
Barinika. ,,
Barranki. ,,
Bari venka. ,,

This tree grows abundantly in Ceylon up to 2,000 feet, and its timber is there esteemed for its hardness and taking a good polish. It is so very plentiful in Ganjam and Goomsur, that it is chiefly used as firewood. It there attains an extreme height of 30 feet, and a circumference of 2 feet. The height from the ground to the nearest branch is 6 feet. It is more common in Guzerat, than in the other parts of the Bombay country. It is rare in the forests there. The wood is there reckoned of good quality, for small purposes, for it will seldom square above 4 inches. It is said to be used in Ganjam for cart-wheels. Its leaves are said by Dr. Royle, to be used to polish horns, and ivory, &c. The bark is used medicinally, the leaves and sap are used for wounds and for a disease of the eye termed Jokia in Oriya, said to be peculiar to children. —*Drs. Gibson. Royle, Ill. Him. Bot., Voigt, Captain Macdonald, Ell. Fl. Andh., Mr. Fergusson.*

TROSUM, HIND. A tree of Jubbulpore with good timber, but the tree does not occur in any quantity.—*Cal. Cat. Ex.* 1862.

TSAN-SAY-PEU? BURM.? A tree of Moulmein, the wood is used for ordinary house-building purposes. Leaf is eaten boiled as greens.—*Cal. Cat. Ex.* 1862.

TSAT-THA, BURM. A tree of Moulmein, the wood is used for building purposes. —*Cal. Cat. Ex.* 1862.

TSEET. A timber of Amherst employed as house-posts and in boat-building. It is said to be sal of small calibre.—*Cat. Ex.* 1851.

TSEKKA-DOUN. A timber of Amherst, said to be of a fruit tree, the wood is used for house-posts, rafters and boat-building, it is like teak, but much disposed to split.—*Cat. Ex.* 1851.

TSENG BYIOU. In Tavoy a compact greyish-brown wood, suitable for common carpentry.—*Mr. Blundell.*

TSHAN-TSHAY. In Amherst, a useful wood, but liable to attacks of insects and to split.—*Cat. Ex.* 1851.

TSHAUP-YO. A timber of Amherst, used for house-posts and musket-stocks. It is a heavy white wood, exceedingly strong, but liable to attacks of insects.—*Cat. Ex.* 1851.

TSHIET-KHYEEN. A timber of Amherst, used for house-posts, a superior kind of crooked-grained sal.—*Cat. Ex.* 1851.

TSHWAI-LWAI. A timber of Amherst, used for musket-stocks and sword-sheaths, it is a hard, red, crooked-grained wood, fit for cabinet work.—*Cat. Ex.* 1851.

TSOAY-DAN. A wood of Tavoy, used for gun-stocks.—*Mr Blundell.*

TSOAY-DAN. In Amherst a heavy, hard, tough wood, not subject to insects, and, being tough and short, it is suited for wheels, musket-stocks, &c.—*Cat. Ex.* 1851.

TSWOT-BA-LWOT. A timber of Amherst, this is said to be from a fruit tree, the wood resembles Jarool or Lagerstrœmia.—*Cat. Ex.* 1851.

TUKKUL, a system of temporary clearing.—*See* KUMARI.

TUN-YEEN OR TUN-YEEN DHA, BURM. Scarce near the Moulmein and Sittang rivers, more abundant near Tavoy and Mergui, of maximum girth 5 cubits, and maximum length 30 or 40 feet. When seasoned it floats in water. It is used for the construction of the very large river boats which go from Moulmein to Tounghoo; hence is in much demand at Moulmein, but not so much so on the sea coast. The wood when cut, has a peculiar and fragrant smell, is tough and oily, and likely to make excellent planes, handles, &c., &c.—*Captain Dance.*

TYE YOO THA OR LAN THAH, BURM. This timber is of maximum girth 2 cubits, and maximum length 22 feet. Found scarce in Tavoy and Mergui, also in less abundance in Amherst province. When seasoned it floats in water. It is a bad brittle wood, and readily splits and warps.—*Captain Dance.*

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UKBEIRIVE. SINGH. A tree of the southern provinces of Ceylon, its wood weighs 51 lbs. to the cubic foot, and it is said to last 80 years. It is in common use for house-building.—*Mr. Mendis.*

ULLOOMBUL MARAM. TAM. A wood of Coimbatore. *See* VADEN COORNIE.

ULMUS, the elm, a genus of plants of the natural order Ulmaceæ, several species of which occur in India and furnish useful and valuable timber. The various species of elm are wild in Europe, North America, India and China, and nearly 20 species have been enumerated, five of which occur in India, but it is now generally recognized that the seeds of the elm do not produce plants precisely like their parents, and on this account there are many recorded varieties of the species which are cultivated for ornament or timber.—*Eng. Cyc., Voigt.*

ULMUS ALTERNIFOLIA, *McClelland.*

Thalai. BURM.

This is one of the largest trees in the Pegu province ; and is found about towns and villages in the Prome district, but not below that latitude. The wood of this tree is red-coloured, strong and adapted for house-building.—*Drs. McClelland, Voigt.*

ULMUS CAMPESTRIS, *L.* THE ELM.

Ulmus Wallichiana, *Planch.* ?

Kaiu. PANJAB.
Kahi. ,,
Brari. ,,
Brankul. ,,
Hembar. ,,
Imbir. ,,
Marazh. ,,
Marari, Marar of Murree Hills.
Marun. PANJ.
Shko of Kanawar.
Maral, Marali, Mehan of Kulu.
Mannu ; Ka, of Hazara.

This tree ranges from the Mediterranean to the Panjab Himalaya, where it is common, wild, in many parts, up to 3,500 to 9,500 feet in Kulu and Chamba, and in the upper part of Kulu. Dr. Cleghorn says there are trees up to 30 feet in girth. It grows to a large size but usually to 60 feet high and 10 to 16 feet in girth. The wood is porous and not greatly valued, but is tough and durable when kept wet, and is used in Kanawar for ark poles, and in Hazara for panels of dog-carts and for damp foundations.—*Mr. Powell quoting Dr. Cleghorn, Dr. J. L. Stewart, p.* 210.

ULMUS EROSA ? AND ULMUS PUMILA, *Pall.*

Manu. PANJAB.
Meru. ,,
Maral. ,,
Maldung ,,
Morun ,,
Amrai. PANJAB.
Chipal. ,,
Yumbok. ,,
Shko of Kanawar.
Hmbro ,,

It is supposed by Dr. Stewart that the vernacular names refer to the two species U. erosa and U. pumila. They occur wild, at 6,000 to 9,000 feet, but are more frequently planted at villages in the W. Himalaya, up to 10,500 feet in Ladak, and grow up to 100 feet high and 17½ to 20 feet in girth. The wood is more open-grained than English elm, and is considered better than that of Ulmus campestris.—*Dr. J. L. Stewart, p.* 210, *Mr. Powell.*

ULMUS INTEGRIFOLIA, *Roxb. ; Cor. ; Pl. Fl. Ind., II,* 68.

Holopteloea integrifolia, *Planch. ; Ann. Des. Sci. Nat. ; W. Ic.*

Thalai. BURM.
Indian elm. ENG.
Wowlee. MAHR.
Dadahirilla. SINGHALESE.
Aya maram. TAM.
Tambachi ,, ,,
Kanchi ,, of Ceylon.
Nali. TEL. of Nalla mallai.
Pedda Nowlee. TEL.
Eragu Nowlee. TEL.
Navili. TEL. of Nalla malla.
Navara. TEL.
Namille. TEL. of Nalla mallai.
Nowlee. ,,
Nalli. ,,
Kanju. Panjab. Kumaon.
Kacham, Eastern do.
Khulain ; Rajain ; papri, Panjab.
Dhoul Papri in Kumaon.

Wherever growing, in Ceylon, or India, this is a large timber tree. In the Circar mountains, where it is a native, it flowers in the cold season, leaves deciduous about the end of the year at the close of the wet season, and come out again in March. It occurs in the drier parts of Ceylon as a fine large tree, grows in Coimbatore, the Animullay, Malabar and Cuddapah forests, is rather common in the Konkan, but less so in the jungles than near to villages and towns ; it grows near Bombay, about Delhi, at Hurdwar, at the foot of the Himalaya in the Bhabur forests of Kumaon, and in the Siwalik hills up to the Bias river. In Pegu, it is one of the largest of the trees, and is found about towns and villages in the Prome district, but not below that latitude. The wood of this tree is reckoned of a good quality by natives of the Circars, and is employed for a variety of uses for carts, door frames, &c. It is of a red colour, strong, and adapted for general purposes, but does not bear exposure well though it could probably be creosoted. In the Panjab, writes Dr. Stewart, its white light wood is apt to splinter, but is employed as roof planks ; and Mr. Powell says that the wood is strong and adapted for general purposes. Mr. Latham, also, writing of that from the Nalla Mallai, says it is a light-coloured wood and said to yield a peculiar odour to boiling water, which when mixed with common arrack gives it the flavour of the more expensive palmyrah arrack and enables the vendors to obtain better prices for their adulterated article. The forks of the branches are used by the natives to protect their straw from cattle.—*Drs.*

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Roxb., Voigt, Wight, J. L. Stewart, Gibson and McClelland, Mr. Rohde, Thwaites, En. Pl. Zeyl., p. 268, *Mr. Latham, Mr. Powell quoting Dr. Cleghorn, Mr. Fergusson, Captain Beddome, Mr. Thompson.*

ULMUS VIRGATA, *Roxb.*

Múldúng of Kanawar.

At 9,000 feet.—*Dr. Cleghorn.*

ULMUS VIRGATA, *Roxb.*, MALDUNG OF KANAWAR. A small tree of China, Nepal, Kumaon and Mussooree, and growing in Kumaon at 9,000 feet: wood not known. But, the elms, to which family the trees in question belong afford valuable timber. In the western Himalaya it grows up to 9,000 feet.—*Voigt, Mr. Powell quoting Dr. Cleghorn.*

UNCARIA GAMBIER, *Hunt.; Roxb.*

Gambier, MALAY. | Unkoodoo karra. TEL. ??

A native of Malacca, Penang, Sumatra, &c., grows in Ceylon near Colombo, and at an elevation of 3,000 feet. The substance called in commerce, gambier and terra japonica, and catechu is prepared from it. The Malays chew it with the betel-leaf, as the Indians do the areca-nut. It is prepared from the leaves of the shrub and somewhat resembles true catechu. Its taste is exceedingly astringent. It is a valuable preservative of timber. The water extract forms a good leather of a red or orange colour.—*Thw. En. Pl. Zeyl.*, p. 133, *Ainslie's Mat. Med.*, p. 264. *See* GAMBIER.

UNDI MARA, CAN. Goolumb. MAHR. Samus of 2 species, abundant in the southern ghat jungles above the Canara and Sunda forests, large and straight. Wood good as it abounds in an aromatic oil, which preserves it from insects. It is mostly in situations too remote from water for the wood merchant.—*Dr. Gibson.* (*Note.*—What trees are these to which Dr. Gibson alludes ?)

UNONA. A genus of plants of south-eastern Asia. U. longiflora is an elegant tree with smooth, pointed, and undulate leaves and is much cultivated in some parts of India to form avenues for shade. It is sometimes called 'Deodara' which is properly the name of the celebrated Himalayan pine, Cedrus deodara. U. tripetala, U. unicinata, U. odorata, are natives of the Indian islands, and U. esculenta a native of the Indian peninsula, has fruit which is edible, but of their timber nothing is known. U. sylvatica is said to be valuable for its timber, U. longiflora, Roxb., is a small tree of Sylhet.—*Voigt, Eng. Cyc.*

UNONA DISCOLOR, *Vahl.*

Uvaria monolifera, *Gaertn.*

A small tree of the Carnatic, Malabar and the Circars, Orissa, Concan, Chittagong, Tavoy and Penang. Wood used for rafters.—*Roxb.*, *II*, 669, *Voigt, Major Beddome.*

UNONA PANNOSA. *Dalz.*

Chennaáree (of the Kaders.)

Wood good, close-grained but small, yields a valuable fibre. Common on the Anamallays and Wynaud, Concan.—*Major Beddome.*

UPAS ANTIAR. The Upas tree.

Antiaris toxicaria, *Lesch.* | Ipo toxicaria, *Persoon.*

Upas tree. ENG. | An char. MALAY.

A native of Java, where it grows in the forests often over 100 feet in height. It yields the Upas poison. The character of its wood is not known.—*Voigt, Dr. O'Shaughnessy, Crawfurd.*

UPPUTAH, the Malayala name of a Malabar wood, which is hard, strong, and heavy. The tree grows to about twelve feet high, ten inches in diameter. It is used by the native carpenters for the frames of boats, of coasting-vessels, and similar purposes, where strength is required.—*Edye, Forests of Malabar and Canara.*

UVARIA, this genus has moderate-sized or small trees. Marsden says that a Uvaria, in Sumatra, furnishes the Poon spars of commerce. But, it may be that he misapplied the Malay word "Puhn" which signifies any tree.

UVARIA, *Species.*

Karee. HIND.?

A tree of Jubbulpore, wood used by natives for making toys.—*Cal. Cat. Ex.* 1862.

UVARIA, *Species.*

Beta goonda. CAN.

Grows in the Canara and Sunda forests, and in the jungles inland of Nilcoond. Wood of rather superior quality, being straight and tough.—*Dr. Gibson.*

UVARIA, *Species.*

Thub-bor. BURM.

A large tree of Tavoy, its wood is used for boat-building.—*Mr. Blundell.*

UVARIA, *Species.*

Hoom. MAHR.

Occurs in the Canara and Sunda forests, in jungles east of Kursulee or Black river; runs tall and straight, and wood is strong and useful, but it is not much known.—*Dr. Gibson.*

UVARIA MACROPHYLLA, *Roxb.* A small tree of Sylhet and Chittagong.—*Voigt.*

UVARIA ODORATA, *Lam.*

Unona odorata, *Dun.*

A small tree of the Tenasserim provinces, Sunda, the Moluccas and China.—*Voigt, Dr. Mason.*

ARIA TOMENTOSA, *Roxb.*

Saccopetalum tomentosum, *H. f. et Th.*

Nalla dudugu. Tel.
Pedda chilka dudugu. Tel.

A tree of Coimbatore and Animallai Hills with a yellow wood, very strong, much similar, but superior, to "Nauclea cordifolia." Cowar shoulder sticks are made from it, but is also used in house-building: it does not warp.—*Captain Beddome, Hook. f. et Th.*

UVARIA TRIPETALA, *Roxb.*

Unona tripetala, *DC.*

A tree of the Moluccas.—*Voigt.*

UVARIA VENTRICOSA, *Roxb.* A tree of Tippera.—*Voigt.*

V

VACHELLA FARNESIANA, *W. & A.; W Ic.*

Mimosa farnesiana, *Roxb. Fl. Ind.*
„ Indica, *Poir.*
Acacia farnesiana, *Willd.*
„ Indica, *Desv. DC.*

Gooya babula. Beng.
Jali mara. Can.
Guya-babula. Hind.
Wilaiti kikar.
Iri babool. Mahr.
Urimeda. Sans.
Veda vully maram. Tam.
Vaday valli maram. Tam.
Peetumma. Tel.
Kampu tumma. Tel.
Kasturi „ „
Arimedamu. „
Naga tumma. „
Oda sale. „

This armed shrub, grows throughout south-eastern Asia, from Sind and the Himalaya to Malacca and Cape Comorin. It is very common in the Dekhan, Mysore and Coimbatore. It furnishes a good, hard, tough wood, greatly resembling that of the babool "Acacia arabica," but the size is very small. It makes excellent ships' knees and tent pegs, and it exudes much gum.—*Drs. Wight and Cleghorn in M. C. C. and M. E. J. R., Voigt.*

VAGHEY, the Tamil name of a Ceylon tree which grows to about twelve inches in diameter: it yields a strong wood, and is used by the natives for wheels of carts, &c.—*Edye on the Timber of Ceylon.*

VAIMBOO, Tam. A Travancore wood of a flesh colour, specific gravity 0·483, 2 to 4 feet in circumference, and used for tables, &c. —*Colonel Frith.*

VAKANATTY, Tam. A Tinnevelly wood of a whitey brown colour, used for building in general.—*Colonel Frith.*

VALLY CANJARM, Tam.? A Travancore wood of a brown colour; specific gravity 0·703, used for building common houses.—*Colonel Frith.*

VAMBOO, Tam. A Tinnevelly wood of a light straw colour, specific gravity 0·795, used for building in general.—*Colonel Frith.*

VANANGU, the Tamil name of a Ceylon tree which grows to about eighteen inches in diameter and twelve feet in height. Its wood is used by the native carpenters in house work &c., and produces a fruit which the natives eat.—*Edye on the Timber of Ceylon.*

VANGAY, a Palghat wood of a light brown colour, specific gravity 0·788. A small tree, used for beams and carts.—*Colonel Frith.*

VANKAY, Tam. A Tinnevelly wood of a light brown colour, specific gravity 0·888, used for building in general.—*Colonel Frith.*

VANPUGGALAH. A Travancore wood of a light yellow colour, specific gravity 0·604, used for light work.—*Colonel Frith.*

VARDAGOUR, the Malabar name of a small tree which is remarkably hard and strong. It is used by the natives for spears, weapons of defence, and such purposes as require the hardest kinds of wood. This tree is only known as jungle-wood.—*Edye, Forests of Malabar and Canara.*

VAROODAH. A Travancore wood of a yellow colour, specific gravity 0·855, used for building houses.—*Colonel Frith.*

VATALOO. A Travancore wood of a purple colour, used only for fire-wood.—*Col. Frith.*

VATANBOO. A Travancore wood of a light brown colour, 2 feet in circumference, used for railings, fences, &c.—*Colonel Frith.*

VATERIA, *Species.*

Le-toak. Burm.

A handsome wood plentiful in the Tenasserim provinces suited for cabinet work, turnery and other purposes requiring a wood of dense structure.—*Major Benson.*

VATERIA CEYLANICA, *Wight, Ill., pp.* 88, 3415.

Stemonoporus Wightii, *Thw.*

A large tree in the forests of Ceylon between Galle and Ratnapoora, and at Palmadolla, near the latter place: wood not known.—*Thw. En. Pl. Zeyl.*, p. 37.

VATERIA INDICA, *Linn.*

Elæocarpus copalliferum, *Retz.*
Chloroxylon dupada, *Ains. Buch.*

Dupa maram. Can.
Piney varnish tree. Eng.
Indian copal tree. „
White dammar tree. „
Peini mara. Maleal.
Vella kondrikam. „
Payani. „
Hal. Singh.
Hal-gass. Singh.
Halgaha. „
Piney maram. Tam.
Kondricam. „
Vela kondrikam. Tam.
Vellay kungilam. Tam.
Chadacula. Tel.
Dupada chettu. Tel.

The oil.

Piney tallow. Eng.
Dupada oil. „
Piney yennai. Tam.

[illegible] large and stately tree, which grows to the height of about 60 feet, with entire, smooth, coriaceous leaves, and terminable panicles of white flowers. It is common in the hotter and western parts of Ceylon, up to an elevation of 2,000 feet, it grows in Animullay hills, Canara and all along the Malabar coast : it is found also in Mysore, its timber weighs lbs. 26 to the cubic foot, and is said to last 10 years. In Ceylon, it is used for packing cases, ceilings, coffins, &c., but, on the western coast of India, it is said to be an excellent and valuable building timber, as not liable to be attacked by the teredo and much employed in ship-building. Mr. Edye says, that the Paini dup-maram (which seems the Vateria indica, for he says it produces a sort of resinous gum), is found in the Cochin and Travancore forests, but is rarely cut down, as the damah taken from it is valuable, and when mixed with the wood oil makes the Paini varnish. This tree he adds, produces the resin in India called Copal, known in England by the name of gum anime, as very nearly approaching the true resin of that name. The best specimens are employed as ornaments, under the denomination of amber (kahroba), to which it bears external resemblance ; in its recent and fluid state it is used in the south of India as a varnish, called Piney varnish, (Buchanan's Mysore, ii, p. 476), and, dissolved by heat in closed vessels, is employed for the same purpose in other parts of India. Another plant of the same genus, V. lanceæfolia, affords a resin from which hindus prepare one of the materials of their religious oblations (As. Res. xii, p. 539). This is an article of export to China from Sumatra, where this tree also grows to a height of thirty to fifty feet and from two to four feet in diameter, and in greater abundance than on the coast of Malabar. When the bark is wounded, a pellucid, fragrant acrid, bitter resinous fluid, called piney varnish "pundun" or liquid copal exudes, which, in the rays of the sun, becomes yellow and fragile like glass. It is in this state that it is well known in commerce, and in England receives the name of gum anime, as above noticed. In India it is usually called copal, also East Indian copal. It occurs of all shades of colour, between pale green and deep yellow and, in India, the finest pieces are sold as amber "Kahruba," Pers. The resin is used in Ceylon as incense. A solid oil is prepared from the seeds and is called Piney tallow or dupada oil, Piney yennai, Tam., which is used for lamps, but is very suitable for soaps and candle-making. The bark of this tree is used in Ceylon to keep toddy from fermenting.—*Eng. Cyc., Captain Hawkes in M. E. J. R., Mr. Adrian Mendis, Thwaites, En. Pl. Zeyl. p. 37, Royle, Ill. Him. Bot., p. 106, Dr. Voigt, Mr. Fergusson.*

VATERIA LANCEÆFOLIA, *Roxb.*

Moal of Sylhet.

A large tree, common in Sylhet, and growing in Assam and the Khassya mountains. It has entire, smooth, coriaceous leaves, and terminal panicles of white flowers. It flowers in April and May and fruits in July and August. It is valuable as a timber tree. It exudes a clear liquid from wounds &c. in the bark, which soon hardens into an amber-coloured resin. From this the natives distil a dark-coloured and strong-smelling resin called Choa, also Chova, and gond ? or gum, in Hindi. The brahmins use it as an incense. —*Voigt, Royle's Him. Bot., Eng. Cyc., Dr. Mason.*

VATERIA LANCEOLATA.

Pan-they-ya. BURM. | Pan-thit-ya. BURM.

Under this name a tree is noticed by Captain Dance, which may be the same as V. lanceæfolia. He says it is found along the coast near Amherst : and is abundant in Tavoy and Mergui but scarcely procurable in Moulmein ; its maximum length is 60 feet and maximum girth 6 cubits, and, when seasoned, it floats in water. It is often called white then-gan, but it is closer and heavier than the then-gan. It is, he says, an excellent wood for tool handles and planes, but has not sufficient spring for helves. The Burmese use it for all purposes to which then-gan is applied, especially in junks, but the Burmese of Amherst say it is not quite so good or durable as then-gan.—*Captain Dance.* (*Note*—Dr. Mason in his Tenasserim speaks of a species of Vateria as a common timber tree in the Provinces of Tavoy and Mergui. The timber, he says, is whiter than Hopea, and equally good. Indeed it is often, he says, called white then-gan, or white Hopea, the woods being only distinguished in commerce by their colour. Wallich in his list of Indian woods mentions *Hopea floribunda* as known at Tavoy by the Burmese name of *tan-the-ya.* This tree is called at Tavoy *pan-the-ya*, but pan-the-ya is said not to be a species of Hopea. Its flowers, in white fragrant panicles, are often seen in the Tavoy bazar, and are very unlike the yellow secund flowers of the hopea. —*Dr. Mason.*)

VATICA, *Species.*

Koung mhoo. BURM.

A tree of Moulmein : wood used for making carts and boats.—*Cal. Cat. Ex.* 1862.—(*See* SHOREA.)

VATICA LACCIFERA, *W. & A. Pr.*, *p.* 84

Jalari. TEL.

This tree grows in abundance in the Nalla-Malla forests of the Cuddapah district, and

CSL

yields a strong timber, very valuable for building purposes.—*Major Beddome.*

VAW-KARAH, the Malayala name of a Malabar and Canara tree which grows to about eighteen feet high, and twelve inches in diameter. It produces the country olives, to which the natives are very partial, they also are eaten by wild beasts and birds.—*Edye, Forests of Malabar and Canara.*

VAYNGIE, in Tamil and Mulu and Vengah in Malayala. This is identified by Major Beddome, as the Pterocarpus marsupium. The wood, says Edye, of this Malabar and Canara tree is of a dark olive and light brown colour, it is very strong and tough, it sometimes grows crooked, and to about two feet in diameter, and from thirty to thirty-five feet long; it is used by the natives both for houses and vessels. This sort has a single leaf in the shape of a pear, but the Vella-Vengah, which is the white or light coloured, has a long leaf, and grows to about eighteen inches in diameter, and twenty feet long. The natives' prefer this wood for boat-crooks, and for the curved parts of the frames of pattamahs and native vessels.—*Edye, Forests of Malabar and Canara.*

VEKKALI TREE WOOD. Anglo-Tam.
Vekkali maram. Tam.

Major Beddome identifies this as the Anogeissus latifolius. A variegated, hard, close-grained, serviceable wood employed by the natives in house-building and also for making doors, windows, handles of instruments, &c. &c.—*Ains. Mat. Med.*

VELA-SALU. The Tamil name of the Ceylon white iron-wood tree which grows to about fourteen inches in diameter, and ten feet high. It is used by the natives for huts, poles, &c., and where strength and durability are required.—*Edye, Ceylon.*

VELATTI, the Tamil name of a tree of Malabar and Canara, which resembles the English pear tree. It grows to about twelve inches in diameter, and fifteen feet high, its wood would answer well for carved-work, from the fineness of its grain.—*Edye, Forests of Malabar and Canara.*

VELATTE, the Tamil name, Ballanju, in Portuguese, of a Ceylon tree, which grows to about fourteen inches in diameter, and eight or ten feet in height. Its wood is remarkably strong, and is used by native carpenters in vessels. It produces a fruit which is eaten by the natives.—*Edye, Ceylon.*

VELCANA, the Tamil name of a Ceylon tree which grows to about twelve inches in diameter, and eighteen feet in height. Its timber in appearance resembles English oak, and native carpenters use it in boats and vessels' frames, knees, &c.—*Edye, Ceylon.*

VELLAH AHGUILL. A Travancore wood of a white colour, specific gravity 0·602, 2 feet in circumference, 50 feet long, used for furniture.—*Col. Frith.*

VELHA AHGUILL, Tam. A wood of Travancore, of a light-brown colour, 2 to 4 feet in circumference, used for furniture—*Col. Frith.* (*Note.*—Are these two identical ?)

VELLA CARDUNTHA, Tam. A Travancore wood, of a brown colour, 3 to 6 feet in circumference, 40 feet long, a strong wood, used for furniture.—*Col. Frith.*

VELLAI-VENGAH, the Tamil name of a Malabar and Canara tree, the wood of which is of a light colour, and very tough and strong. It is used by the natives for the frames of vessels, or where strength is required; it grows to about eighteen inches in diameter, and twenty feet long, and the small branches make good boat crooks.—*Edye, Forests of Malabar and Canara.*

VELLA-LAVA, Tam. A wood of Travancore of a brown colour, used for light work. —*Colonel Frith.*

VELLA-NEER-MARADOO, Tam. Major Beddome identifies this as the Terminalia arjuna. A wood of Travancore of a light-yellow colour; specific gravity 0·573, used for furniture.—*Colonel Frith.*

VELLE AERE, White Aere, the Tamil name of a Ceylon tree, grows to about 12 or 18 inches in diameter, and 20 feet in height. It has a light wood, and is generally converted into catamarans, being considered useful for that purpose only.—*Edye, Ceylon.*

VELLE-ELOW, the Malayala name of a Malabar and Canara tree that grows to about sixteen feet high and eight inches in diameter, it is used by carpenters for the frames and knees of country vessels, it produces a white seed which the natives use medicinally.—*Edye, Forests of Malabar and Canara.*

VELLE NEALEA, the Malayala name of a Ceylon tree which grows to about ten inches in diameter, and ten feet in height. The branches of this tree are very strong, and are used for the frames of native vessels.—*Edye, Ceylon.*

VELLI-ELLUS, a Malabar and Canara tree, little used except by the natives for house work, its growth is small, and it is rather scarce.—*Edye, Forests of Malabar and Canara.*

VELL VIRU, the Tamil name of a Ceylon tree which is about fourteen inches in diameter, and eight feet in height. Its strength and durability induce the natives to prefer it to other wood for the purpose of supporters to their huts.—*Edye, Ceylon.*

VELTY MARAM, Tam. A Travancore wood of a purple colour, specific gravity 0·623, used only for firewood.—*Colonel Frith.*

VELTY TADDY, Tam. A Travancore wood of a brown colour, specific gravity 0·625, used only for firewood.—*Colonel Frith*,

VEMBAH, the Tamil name of a tree which grows in Travancore; it is close-grained and of a yellow tinge, and grows to about twenty feet long, and fifteen inches in diameter; it is used for native purposes. The bark of this tree is steeped, and used by the natives in cases of eruptions in the skin; and also to purify the blood after fevers, for which it is considered most valuable.—*Edye, Forests of Malabar and Canara.*

VEM-MARAM, Tam. A Tinnevelly wood of a brown colour; specific gravity 0·786, used for building in general.—*Col. Frith.*

VENERAH, the Malayala name of a jungle tree of Malabar which grows to about twenty-four feet in height, and eighteen inches in diameter. It is used in building native vessels and for other native purposes. —*Eyde, Forests of Malabar and Canara.*

VENGA MARAM, Tam.

Yepi? vriksha. Can.	Yapa chettoo. Tel.?

Major Beddome identifies this as Pterocarpus marsupium. This is reckoned by the natives of the Circars a very useful wood, it is of a reddish colour and is employed in making doors and windows and other common purposes. It is in common use both for building and for furniture in the Masulipatam district, it is a very heavy wood, but not strong: when used for rafters, it should be cut very broad in comparison to its thickness.—*Mr. Rohde.*

VENGENDAH, the Tamil and Malayala name of a Malabar tree which the natives use for catamarans and in rafts for heavy timber, it is remarkably soft and spongy, and not of much use or durability.—*Edye, Forests of Malabar and Canara.*

VENGULA CYAM, the Tamil name of a Ceylon tree of little value. It grows to about twelve inches in diameter, and six feet high, and produces a fruit which is not made use of.—*Edye, Ceylon.*

VEN-PALLA, Tam. A Travancore wood of an ash colour. Only used for carved figures, sandals, &c.—*Col. Frith.*

VEN-TEAK, in Tamil and Bellinger in Malayala. This Malabar tree is identified by Major Beddome as the Lagerstrœmia microcarpa. It is much used by the native carpenters for house-building and masts for dowes, pattamahs, and other country vessels. It grows to ninety and one hundred feet long, and from twelve inches to three feet in diameter, it is perfectly straight and without branches, excepting at its top; the leaves are small and very thick. This wood is not so durable as the poon, but it may be considered of the same texture, although it is very much lighter in colour, and in this respect much resembles the American red oak.—*Edye, Forests of Malabar and Canara.*

VERAETAL, the Tamil name of a Ceylon tree which grows to about fourteen inches in diameter, and eight feet high. It resembles mahogany, but is capable of a more brilliant polish, the natives use it for superior purposes. It produces a kind of fruit which is of little use.—*Edye, Ceylon.*

VERAM PELOW, the Malayala and Tamil name of a Ceylon tree known by the name of Jackwood. It is now identified by Major Beddome as the Artocarpus integrifolia. It is common throughout India, and of great value to the natives, its fruit and nuts forming a part of their food. The wood when cut is yellow, but, when exposed to the air, turns as dark as mahogany, to which it is superior in brilliancy. It is generally used in articles of furniture for the Europeans, and for house-work, and is considered handsome, the largest tree of this kind which Mr. Edye had seen was about three feet in diameter, and from thirty to thirty-five feet high, in Canara this was the wood which Tipu sultan used for his vessels at Honore, where his naval depôt was formed.—*Edye, Ceylon.*

VERDA CANARA, the Tamil name of a Ceylon tree which grows to about twenty inches in diameter, and from thirty to sixty feet high. At times, some of the country vessels get their masts from this tree, it is not durable or strong.—*Edye, Ceylon.*

VERNANGU, the Tamil name of a Ceylon tree which is also named mast-wood. It is light and is used by the natives for the masts and yards of small vessels. It grows to about twenty inches in diameter and from twenty to forty feet in height. It produces a fruit or seed similar to that of the Poon.—*Edye, Ceylon.*

VERNONIA JAVANICA, *D.C.*, 160.

Kobo Neela. Singh.

This large forest tree grows to 50 and 60 feet in height in several parts of Ceylon. Its timber is light and spongy, flowers very fragrant and much frequented by wild bees. —*Mr. Fergusson.*

VETTI MARAM, the Malayala name of a Malabar tree, that grows to about twelve feet high, and eight inches in diameter. Its wood is much admired on account of its handsome dark streaks of black and brown, with white and yellow ground. It is very much like ebony in grain, and also in leaf. It produces a flower which is considered sacred; and is used for decorating the women on days of ceremony at the pagodas.—*Edye, Forests of Malabar and Canara.*

VEROOSOO, TAM. A Tinnevelly wood, of a whitey brown colour; used in building in general.—*Col. Frith.*

VEYTTY, a Travancore wood, of a light brown colour. Used for making carts, ceilings, &c.—*Col. Frith.*

VIBURNUM. Three species of viburnum, cotinifolium, fœtens and stellionatum, form the underwood of forests in the Himalayan valleys, and are used chiefly for firewood. The berries of V. fœtens and V. stellionatum are edible.—*Mr. Powell.*

VIPENIE, the Tamil name of a Ceylon tree; which grows to fourteen inches in diameter, and from twelve to fifteen feet high; it is used for boat-work and house-furniture. —*Edye on the Timber of Ceylon.*

VIREY, the Tamil name of a Ceylon tree which grows to about twenty inches in diameter, and twelve feet high. This yields a very handsome hard wood. It produces a kind of seed which is very mealy and which the poorer class of the natives eat as a substitute for rice.—*Edye on the Timber of Ceylon.*

VISENIA VELUTINA, *W. Ic.*

Riedelia velutina, *DC.*
Glossospermum velutinum, *Wall.*
Visenia umbellata, *Blain.*

A considerable tree of Java and Mauritius, of great beauty, with rose-coloured flowers and velvety leaves; introduced from Sumatra into the Society's Garden, by Dr. Wallich.—*Voigt, Dr. Cleghorn in M. E. J. R.*

VITEX, *Species.* A tree of considerable size, a native of the forests in the interior of Coromandel.—*Mr. Rohde's MSS.*

VITEX, *Species.*

Kjo-yoh. BURM.

This wood of British Burmah is used for tool handles, and is much prized, but rather scarce; a cubic foot weighs ℔s. 45. In a full-grown tree on good soil, the average length of the trunk to the first branch is 15 feet, and average girth measured at 6 feet from the ground is 3 feet.—*Dr. Brandis, Cal. Cat. Ex.* 1862.

VITEX, *Species.*

Kyne.

A handsome species, moderately common in all the well-wooded shady ravines of Kumaon and yields a large handsome timber resembling Toon, in grain and colour.—*Mr. Thompson.*

VITEX ALATA, *Roxb.*

Mel-ilow. MALEAL.

A small tree found in the Naggery hills, leaves ternate, petioles winged. It occurs in the Bombay presidency, but is rare also in Goalpara. Both it and V. leucoxylon have a white compact wood, apparently good for turning, as well as for cabinet work.—*Drs. Cleghorn and Gibson,* (*Note.*—It would be desirable to learn more of this tree.)

VITEX ALTISSIMA, *Linn.; Roxb.; W. Ic.*

White cedar. ENG.
Katu mellau mara. MALEAL
Meeyan milillla-gass. SINGH
Milila-gaha. SINGH.
Milillla-gass. ,,
Kaha(yellow) milila. SING.
Sapu (light) ,, ,,
Mee-an (buffalo horn) ,, ,,
Kat miella maram. TAM.
Maila. ,,

In Ceylon, it is a common forest tree up to an elevation of 3,000 feet, and yields one of the best and most largely used of the timbers of that island when a fine, close-grained, hard, tough and durable wood is required. The kaha, sapu and mee-an milila are mere varieties of it. It grows in most of the Madras forests. In Coimbatore, it is a large tree, of great beauty when in flower, and it is frequent on the slopes of the western ghats, and yields a very valuable timber.—*Thw. En. Pl. Zeyl.*, *p.* 144, *Drs. Wight, Cleghorn and Gibson, Major Beddome, Mr. Fergusson.*

VITEX ARBOREA, *Roxb. Ill.*, 73; *Rheede.*

V. pubescens, *Wall.*, *W. Ic.* 1,465, *Vahl.*

H'touk Sha. BURM.
Touk-t'sa. ,,
Chaste tree. ENG.
Katta mellalu. MALEAL.
Nevali adugu. TEL.
Nawel busi eragu. ,,
Neval adugu manu. ,,
Nowlee eragu. ,,

A native of Ceylon of the mountainous parts of the Circars, of the forests of the Godavery, growing in Silhet, Chittagong; very common at Moulmein and found at Tavoy, Penang and Singapore, its flowering time is the hot season, and the seed ripens during the rains. In the Circars and Chittagong it grows to be a very large tree, and at Moulmein it furnishes a valuable small timber. Its wood is hard, of a yellowish-brown colour, and when old is chocolate-coloured, very hard and durable, which renders it useful for various ordinary purposes.—*Voigt, Roxb., Captain Beddome, Dr. Mason, Cal. Cat. Ex.* 1862, *Thw. En. Pl. Zeyl.*, *p.* 244.

VITEX LEUCOXYLON, *Roxb.*

V. saligna, *Roxb.*

Karril. MALEAL.
Neva-ledi. TEL.
Luki. TEL.
Karril, CAN. of RHEEDE.

A native of the hotter parts of Ceylon, of both the peninsulas of India, Coromandel, Assam, and the mountains of Chittagong. According to Dr. Gibson, it is not uncommon by the edges of streams in the south Konkun, and the ghaut jungles of the Bombay presidency; wood white and compact. Dr. Brandis says it is a large, very common tree in the plains of British Burmah, flowering time April, wood grey, deserves attention for furniture, used for cart wheels, breaking weigh 142 lbs. A cubic foot weighs lbs. 42. In a full-grown tree on good soil, the average length of the trunk to the first branch is 30 feet, and average girth measured at 6 feet from the ground is 12 feet. It sells at 8 annas per cubic foot. —*Thwaites, Drs. Voigt, Gibson and Brandis, Cal. Ex. of* 1862, *Mr. Fergusson.*

VITEX LITTORALIS.

Parede New Zealand.
Kauwere of New Zealand.
New Zealand teak. ENG.

Grows to the height of 25 to 30 feet and 12 to 18 feet in circumference, with elegant drooping pink flowers and a red fruit. Its wood is very hard, heavy and close-grained, and is the most durable of the New Zealand woods. The timber of the young trees is yellow, but that of full-grown trees is of a dark-brown colour. It injures the axe in felling and can be best worked when green. It takes a fine polish, splits freely, and bears exposure well, it is therefore very valuable for ship-building and posts.—*Bennett's Gatherings.*

VITEX NEGUNDO, *Linn.; Roxb.; W. Ic.*

Vitex paniculata, *Lam.*

Fenjengisht. AR.
Nishinda. BENG.
Nergundi. ,,
Shumbali. DUK.
5-leaved chaste tree. ENG.
Nisinda. HIND.
Sembhalu. ,,
Ban nuchi. MALEAL.
Banna, plains of Panjab.
Bankahu of Hazara.
Mawa, also marwa of Salt Range.
Marwande. Pashtu of Waziristan.
Sinduya. SANS.
Sindhuka. ,,
Soodoo Nikka gass. SINGH.
Vella nuchi. TAM.
Veyala chettu. TEL.
Wayalaku. ,,
Wyala. ,,
Nalla vavali. ,,

A small tree common in Ceylon on the banks of rivers, up to 3,000 feet in the peninsula of India, in Bengal, the N. West of India, the Dehra Dhoon and the Moluccas.— *Thw., p.* 244, *Voigt, p.* 469, *Dr. J. L. Stewart.*

VITEX TRIFOLIA, *Linn.*

Ussel ke abi ?? AR. ??
Kara nuchi. CAN.
Nirgunda. DUK.
Pani ke shumbali. ,,
3-leaved chaste tree. ENG.
Indian privet. ,,
Nisinda. HIND.
Sedhari. ,,
Nishinda. ,,
Karu nuchi, MALEAL.
Jala nergundi. SANS.
Sinduvara. ,,
Sappo milile? SINGH.
Meean ,, ? ,,
Caha ,, ? ,,
Nir nochi. TAM
Vavili chettu. TEL.
Tella vavili. ,,
Caranosi. RHEEDE.

A small tree, found in south-eastern Asia. These botanical and Singhalese vernacular names are given by Mr. Mendis to a tree which grows in the western provinces of Ceylon, its wood weighing lbs. 56 to the cubic foot and lasting 20 to 90 years. Edye describes the Mean milille, as a very hard, fine, close-grained, heavy, Ceylon wood, and Mr. Mendis says, it is used for bridges, water-casks, paddle-boats, carts, waggon-wheels, bullock-carts, water-tubs and house-buildings. Under the name of Caba-milile he describes the V. trifolia as occurring in the southern and western districts of Ceylon and, as Sappoo milile, in the western and southern districts, but weighing 49 feet to the square foot and lasting 10 to 40 years. The Singhalese synonyms, Caha, Sapu and Meean, are given by Mr. Fergusson to V. altissima. Mr. Thwaites merely says, the V. trifolia is not uncommon near the sea, in Ceylon.—*Messrs. Edye and Mendis, Thw. En. Pl. Zeyl., p.* 244. *See* V. ALTISSIMA, to which, doubtless most of these synonyms belong.

VITMANNIA TRIFOLIA.

Samadera. SINGH.

Under these names, Mr. Mendis notices a tree of the western province of Ceylon, the wood of which weighs 26 lbs. to the cubic foot and which is used for buoys, &c., it is said to last 60 years.—*Mr. Mendis.* (*Note*—To what tree does Mr. Mendis here allude?)

VIZAGAPATAM. Large supplies of Sal (Shorea) and Yegis (Pterocarpus marsupium) timber find their way to the coast in the north part of the Vizagapatam district, and in the whole of Ganjam.—*Conservator's Report, p.* 12. *See* GANJAM.

VOODAGA WOOD. A wood of the Northern Circars.

VUTTY MARITHY, TAM. A Travancore wood of a brown colour, specific gravity 0·595, used in building common houses.—*Colonel Frith.*

VUDDAMBA. A Travancore wood of a brown colour, specific gravity 0·750, used in building common houses.— *Colonel Frith.*

VULOEAL, OR VULOAYLUM MARAM. In Ceylon, the Tamil name of a strong wood which is used by the natives in making farming utensils. It grows to twenty inches in diameter, and twelve feet in height. The bark of this tree, with the maradum bark and ginger, is used by the natives for cleaning and preserving the teeth.—*Edye on the Timber of Ceylon.*

W

WALSURA PISCIDIA, *Roxb.; Fl. Ind. II.*, 388; *W. & A.; W. Ill.*

Joe-boe. Burm.
Kiri kong. Singh.
Walsura. Tam.
Vilarasi. Tel.
Wallurasi. Tel.

This timber tree is not common in Ceylon; but is common in the Peninsula, and is very plentiful in the Pegu, Tounghoo and Tharawaddy forests. The timber, of a white colour, is large, heavy and strong, and adapted for every purpose of house-building. In India, the bark is thrown into ponds to stupify fish, which, coming to the surface, are easily taken, and are not considered injurious to be eaten.—*Roxb., Royle, Ill. Him. Bot., p.* 143, *Voigt, Dr. McClelland, Mr. Fergusson.*

WALUKENE, Singh. A tree growing in the western and southern districts of Ceylon, its timber weighs 39 lbs. per cubic foot, and lasts about 10 years. It is used for masts of dhonies.—*Mr. Mendis.*

WARDAH RIVER. Timber rafts can be floated down this river.—*Madras Conservator's Reports, p.* 4.

WEBERA CERIFERA.

Tarrone. Singh.

Under these names Mr. Mendis mentions a tree which grows in the northern provinces of Ceylon, its timber weighs 57 lbs. to the square foot, and is said to last 30 years. It is used for roofings and in the construction of fishing boats and dhonies.—*Mr. Mendis.*

WENDLANDIA. Of this genus of small trees, several occur in the south of Asia, W. cineria in Jhullundhur, W. exserta in Gour, Nepaul, the forests of the Godavery and Sumbhulpore, W. notoniana in Ceylon and the Neilgherry and Pulney hills, and W. tinctoria, (Rondeletia) in Burdwan, Midnapore, the Northern Circars and Cuttack.—*Voigt, Mr. Fergusson, Lieut.-Colonel Lake, Major Beddome.*

WENDLANDIA CINEREA?

Chilla of Jhullundhur.

A small tree of Jhullundhur, wood white, soft and brittle; used by zemindars in the small wood-work of their houses. Bears a yellow bitter fruit, the seed of which is used to poison fish.—*Lieut.-Col. Lake, Commmissioner, Jhullundhur Division.* (*Note.*—In the list received from Lieut.-Col. Lake, the name as printed is Wurdlandia coneria.)

WENDLANDIA NOTONIANA, *Wall.*

Rawan. Singh.
Rawan Iddala. Singh.

Literally, Rawan's Broom. Mr. Fergusson, of Ceylon, knows it only as a tall shrub or very small tree. Mendis' list, No. 74, "Common house-buildings." The sticks make excellent fences, most durable. Wright's list, No. 62, says "Used by natives, very durable under ground."—*Mr. Fergusson.*

WIHA OUNG, Burm. A tree of Moulmein, used for all ordinary purposes of building.—*Cal. Cat. Ex.* 1862.

WON-THAY-KHYAY, Burm. In Tavoy, a small, strong, compact, yellowish white wood.

WOOD-ENGRAVING. The following Madras woods have been found suitable, viz:

Guava, Psidium pyriferum; the best.

Palay, *Tam.* Mimusops hexandra. A good wood, but liable to be attacked by insects.

Vepalley, *Tam.* Wrightia antidysenterica. A fine close-grained wood, not quite so hard as the guava, but improving with age.

Jujube or Ber fruit tree, Zizyphus jujuba; rather soft.

Wood-apple tree, Feronia elephantum, too coarse in the grain.

Satin-wood, Swietenia chloroxylon. A close-grained wood, but apt to split.

Box wood of the Himalaya.—*Dr. Hunter.*

WOOT-THA, Burm. A tree of Moulmein. A strong wood for any ordinary purposes.—*Cal. Cat. Ex.* 1862.

WOON, Uria. A scarce tree of Ganjam and Goomsur, extreme height 60 feet, circumference 5 feet, and height from the ground to the intersection of the first branch, 5 feet. No use is made of the wood: the tree is prized on account of its fruit which is pickled and eaten: the leaves are used for eating platters; the flowers are eaten.—*Captain Macdonald.*

WORMIA BRACTEATA, *H. f. et T., Fl. Ind., p.* 68.

A tree of the hills of Coimbatore, Mysore, Cuddapah and N. Arcot. Its wood is strong, but splits easily.—*Major Beddome.*

WORMIA TRIQUETRA, *Rottl.*, (*H. f. et T., l. c., p.* 67)—*c. p.* 1013.

Deeyapara. Singh.

A moderate-sized tree, common in the moist warmer parts of the island of Ceylon up to an elevation of 2,000 feet.—*Thw. En. Pl. Zeyl., p.* 4.

WRIGHTIA, *Species.*

Boojee kooroowan. Uria.

A tolerably common tree of Ganjam and

Go[illegible]ur, attaining an extreme height of 25 feet, circumference 2 feet, and height from the ground to the intersection of the first branch, 8 feet. Burnt for fire-wood. Its milky juice is used for wounds.—*Captain Macdonald.*

WRIGHTIA, *Species.*

Toung-za-lat. BURM.

A tree of British Burmah. In a full-grown tree, on good soil, the average length of the trunk to the first branch is 40 feet, and average girth measured at 6 feet from the ground is 5 feet. It yields a beautiful wood. A cubic foot weighs lbs. 55.—*Dr. Brandis and Cal. Cat. Ex.* 1862.

WRIGHTIA ANTIDYSENTERICA, *R. Br.*

Nerium antidysentericum, *Linn.; A ins.; Roxb.*

La-thou. BURM.
Conessi bark tree. ENG.
Inderjau. HIND.
Vepali. TAM.
Veppaula. ,,
Kodaga pala. TEL.
Pala chettu. ,,
Girimallika. ,,
Kalingamu. TEL.
Kodisa pala chettu. ,,
Kodisa chettu. ,,
Kodisa pala. ,,
Kola mukki chakka. ,,
Kutajamu. ,,
Manu pala. ,,
Pedda ankudu chettu. ,,

The wood.

Palavarani. ENG.
Palay wood. ,,
Dudhii-ki-lakri. HIND.
Veppallay. TAM.
Palava renu. TEL.

The bark.

Conessie. FR.
Curayia. GUZ. HIND.
Curaija. ,,
Codaga pala. MALEAL.
Palapatta. ,,
Corte-de-pala. PORT.
Chiri. SANS.
Kutaja. ,,
Veppalei. TAM.
Pala codija. TEL.
Manupala. ,,

The seed.

Lisan-ul-assafir. AR.
Indrajow. GUZ.
Ahir. PERS.
Indrayava. SANS.
Veppalei arisi. TAM.

A small tree of common occurrence in Mysore and the hilly parts of Southern India, and occurring also in Tavoy: the wood is of little value, but its medicinal virtues are worthy of attention, the bark was formerly in request under the name of *Conessi*, and by the natives is still esteemed a valuable drug in dysentery and bowel complaints. It appears to have lost its value in commerce, by not being distinguished from the bark of Wrightia tinctoria which grows in the same places.—*Voigt, Fl. Andh., Mr. Faulkner.*

WRIGHTIA COCCINEA, *Sims.*

Nerium coccineum, *Roxb.*

A tree of Ceylon and the Khassya hills with a light and tough wood, used in Ceylon for making palanqueens.—*Roxb.*, ii, *p.* 2, *Voigt*, 526, *Mr. Fergusson.*

WRIGHTIA MOLISSIMA, *Wall.*

Dudhia. HIND.
Khilawa, Kilawa. PANJ.
Khilara, Kumaon. PANJ.

This large shrub attains a height of 15 feet; it grows near Madras on the Naggery hills; grows in Saharunpore, in Dehra Dhoon, is abundant in most of the forests of Kumaon, Bijnore and Gurhwal, and grows up to 3,500 feet on the Siwalik hills. Its wood is of a light yellow colour, soft, light, fine-grained and durable: it polishes well, and along the foot of the Himalayas it is much used in ornamental carving and in turnery. Combs are made of it, also agricultural implements. It has an abundant yellow juice.—*Drs. Cleghorn and J. L. Stewart, p.* 143, *Messrs. R. Thompson and Powell, Lieut.-Col. Lake, Voigt,* 526.

WRIGHTIA ROTHII, *Don. W. Ic.* 1319.

A tree of the Godavery forests, with wood similar to that of Wrightia tinctoria.—*Major Beddome.*

WRIGHTIA TINCTORIA, *R. Brown; W. Ic.*

Nerium tinctorium, *Roxb.*

Kala Koodoo. HIND. MAHR.
Pallay maram. TAM.
Chitti ankudu. TEL.
Amkadu. TEL.
Tedla pala. ,,

A small tree, of Ceylon, found in the Coimbatore, Godavery and most other forests of the Madras Presidency; very common in all the forests of Bombay, and occurs in the Panjab. It affords a very beautiful wood, white, hard and close-grained; in the words of Dr. Roxburgh "coming nearer to ivory than any I know." In the Coimbatore jungles, where it is common, it attains a considerable size, but is not much in use there, but that of the Godavery is described as most valuable for turning. The leaves are said to afford an inferior kind of indigo, hence the Mahratta name. It is extracted by scalding.—*Drs. Roxburgh*, ii, *p.* 4, *Voigt*, 525, *Wight, Gibson and Cleghorn, Captain Beddome.* (*See* NILAM PALA.)

WRIGHTIA TOMENTOSA, *R. et Sch. A. DC. Prod.; W. Ic.* 443.

Nerium tomentosum, *Roxb.* | Koila mookree. TEL.

A small tree, not very uncommon in the central province of Ceylon: grows in the Animullay, the Circar and the lower Godavery jungles, in the Concans, Segaen and Martaban. Wood appears close-grained, but not used. The juice is a permanent yellow dye. Bark given internally for scorpion bites. Dr. Gibson thinks this is identical with W. tinctoria.—*Dr. Roxb.*, ii, *p.* 6, *Voigt*, 525, *Thw. En. Pl. Zeyl.*, *p.* 193, *Captain Beddome, Voigt.*

WYNAAD FOREST LANDS, are principally the four Umshom adjoining the teak forests, viz., Moonanad, Ganaputhy vuttum, Ellornad, and Poolpully dasum of Koopatode. They contain blackwood, &c., and much bamboo land. In many places, the land is well fitted for coffee. The destruction of these forests not containing teak for the bonâ fide cultivation of coffee is considered by the Conservator legitimate, but not so for raggi, which for ever spoils the land from being cultivated for coffee. At least, if raggi is cultivated on lands unsuited for coffee, it should be done on a puttah, with permission of the deputy collector and taxed at a low rate. This system is carried to a great extent in the Umshom of Ganaputhy vuttum and Moonanad in bamboo and tree jungles. The extent of Government lands in Wynaad is not known, but Government also possess some forest lands towards Periah and Teriate, and in several spots over Wynaad. In the teak belt are several bands of Coorumburs, some of the Jani and others of Mooly caste they amount to about,

Coorumbur.....	200	Panniar and Pooliar..	100
Gurchea........	50	Chetty and Squatter..	50

The former live entirely in the forest. They are the only axemen, and without them it would be difficult to work a forest. The Coorumbur, through their headmen, are held responsible, and the Chetty are also responsible for their Panniar or farm slaves. The Coorumburs' services are constantly called for by the wood contractor and the planter. They will not leave their haunts in the forests for any time. From Korchat in the east to Kooderykote in the west, a distance of some forty miles, part clearings for raggi have from time to time taken place, and there is hardly a square mile where traces of the Tukkul, temporary clearing system, may not be seen; but owing to the richness of the soil, and moisture of the climate, the teak tree has, in most places, defied all efforts at extirpation. In some parts suckers from the old stoles, shooting up some fifty feet, straight as a fir, may be counted by thousands. In other parts it is lamentable to see the destruction caused by the Coorumbur ; acres and acres of girdled Teak trees of every size from the sapling six inches in diameter, to the noble tree upwards of three feet. Very high prices have been realized for this dry teak, as it is called, eight annas a cubic foot, or on an average ten Rupees a tree, some of the trees being small, this rate may be considered as very remunerative.—*Rep. Con. For., p.* 26, *and* 1861-62, *p.* 1.

X

XANTHOCHYMUS OVALIFOLIUS, *Roxb., Fl. Ind., II,* 632.

Xanthochymus spicatus, *W. & A.*

Elagokatu-gass. SINGH.
Kokatie. TAM.

Grows in Ceylon from Jaffna to Batticaloa, in the western Ghats, in Rangoon, Pegu and Tounghoo districts, but is rather scarce ; it was at one time supposed to yield gamboge. Its flowers give forth a fetid odour.—*Roxb.,* ii, 632, *Dr. McClelland, Mr. Fergusson, Major Beddome.*

XANTHOCHYMUS PICTORIUS, *Roxb. Fl. Ind., II,* 633.

Stalagmitis pictorius, *G. Don.*

Dampel. HIND.
Eeswara mamidi. SINGH.
Iswara mamadi. TEL.
Twara mamadi. ,,
Chitaka mraku. TEL.
Tamalamu. ,,
Rata. GHORKA.

Grows in the Western Ghats : is very plentiful in the Rangoon, Pegu and Toungboo districts. It was formerly supposed to be one of the trees yielding gamboge, but the product is found not to possess the elements of gamboge.—*Roxb.,* ii, 633, *McClelland.*

XANTHOPHYLLUM, *Species.*

Sa-phew. BURM.

A very large tree, growing in Martaban, where it is used for posts and rafters. There are two other species of Xanthophyllum in Tenasserim.

XANTHOPHYLLUM FLAVESCENS, *Roxb.* This is a large tree, a native of the hilly parts of the province of Chittagong.—*Roxb.* ii, *p.* 222.

XANTHOPHYLLUM VIRENS, *Roxb.*

Gundee. BENG.

A large timber tree of the forests of Sylhet, the Khassya mountains, Assam ; wood remarkably hard and useful.—*Roxb.* ii, *p.* 221.

XANTHOXYLON. This extends northwards into the temperate zone, and species occur in China and Japan, and extend in India to Simla in 31° N. latitude, where X. hostile, differing little from X. alatum, is found. Other species run southwards along the Himalayas to Nepal and Sylhet, and then to the Malayan and Indian peninsulas, whence we may trace them to the African islands on the east of that continent. In India X. budrunga, rhetsa, alatum and hostile, are used, wherever they are indigenous, for the warm spicy pepper like pungency of their capsules, a property which is participated in by their bark and other parts. The capsules and seeds of X. hostile, called tej-bul by the natives are employed in northern India for intoxicating fish, and chewed as a remedy for tooth-ache : they are also given as the Fughurch of Avicenna, as Z. piperitum and Avicennæ, are in China and Japan, and are considered an antidote against all poisons.

Dr. Royle has no doubt that in many cases they would be of considerable use as a stimulant remedy.—*Royle, Ill. Him. Bot., p.* 157.

XANTHOXYLON BUDRUNGA, *DC.*

Fagara budrunga, *Roxb.; Fl. Ind.*

Toung-than. BURM. | Young-tha-ji. BURM.

A tree of Assam and Pegu, wood not known : seeds have the fragrance of lemon peel, and are used medicinally.—*Voigt.*

XANTHOXYLON HOSTILE.

Timar; Timmoor; Timbur; Tambar; Timru; Timbru of Jullundhur, Kanawar, Ravi and Sutlej.

Timmal, Tirmal, Tirmar of the Panjab, Chenab and Beas.

Seeds and Bark.

Tezbul. HIND. | Kabába. HIND.

A very prickly scandent shrub, common in Kumaon, in many parts of the Siwalik hills from 2,000 to 6,000 feet, up to near the Indus : its small timber is used for carving, turnery, for pestles, walking-sticks, clubs, and pestles of this wood are used in preference to others in bruising bhang, to impart a pepper-like flavour. Its pungent aromatic fruit is used as a condiment to improve digestion. Its bark is astringent, and according to Dr. Brandis, is employed to kill fish.—*Messrs. Powell and R. Thompson, Dr. J. L. Stewart.*

XANTHOXYLON RHETSA, *Roxb. Fl. Ind., I,* 417, *D C.; W. & A.; Rh.*

Fagara rhetsa, *Roxb.*

Mulila. MALEAL.
Kattoo-keena-gass. SINGH.
Ugurossa. ,,

Rhetsa maram. TAM.
Rachcha manu. TEL.
Rhetsá manu. ,,

This large tree grows in the Northern Circars, in the Western forests, on the Animallay hills, the coast hills of peninsular India in the central province of Ceylon and near Colombo : wood not known ; capsules aromatic ; inner lamina of bark bitter and acrid.—*Roxb., I, p.* 417, *Thw. En. Pl. Zeyl., I, p.* 69, *Voigt, p.* 186, *Mr. Fergusson, Major Beddome.*

XANTHOXYLON TRIPHYLLUM, *Juss.; Roxb., Fl. Ind., I,* 416.

Xanthoxylon zeylanicum, *DC. Prod.*
Evodia triphylla, *DC.*
Fagara ,, *Roxb.*

Loonoo-ankenda-gass. SINGH.

Grows in the Animallay and Coimbatore hills. Very abundant in Ceylon up to an elevation of 5,000 feet, var. β near Ratnapoora. Wood very strong.—*Roxb., Thw. En. Pl. Zeyl., I, p.* 69, *Major Beddome.*

XYLOCARPUS, *Species.*

Ke-an-nan. BURM.

This tree grows in Tavoy, is found very abundant all along the sea shore from Amherst to Mergui, and in the Mergui Archipelago. It is very common in the mangrove swamps. Its maximum length is 20 feet, and maximum girth 4 cubits, and when seasoned it floats in water. It has a very good, fine, strong and durable wood, splits with difficulty. It is used by Burmese for all parts of houses, posts, flooring, walls, &c., and is recommended by Captain Dance for hand-spikes, helves, spokes and handles of tools, also for shot boxes and packing cases. It is also much used for sandals, and canoes are occasionally made of it. It seems to be the same as that described by Dr. Mason as growing on low lands near the sea coast, and producing a red wood which turns black on being anointed with petroleum. Its inedible fruit falls into the sea, on which it floats.—*Dr. Mason, Captain Dance.*

XYLOCARPUS ECHINATUS???

Ah Nan???

A tree of Moulmein, a very strong wood, used for making gun stocks and sword scabbards.—*Cal. Cat. Ex.* 1862.

XYLOCARPUS GRANATUM, *Kœn., W. & A.*

Carapa Moluccensis, *Lam.*

Puroos. BENG.
Pen-lay-pyoun. BURM.
Pen-lai-ung. ,,

Penlay-oong. BURM.
Sea cocoanut. ENG.
Kandalanga. TAM.

Grows in many localities in south India, in the south of Ceylon and in the forests of the delta of British Burmah ; wood used for house-posts and musket stocks. A cubic foot weighs lbs. 47. In a full-grown tree on good soil, the average length of trunk to the first branch is 20 feet, and average girth measured at 6 feet from the ground is 12 feet. Captain Dance also says its maximum girth is 4 cubits and maximum length 20 feet. Very abundant all along the sea shore from Amherst to Mergui. When seasoned it floats in water. It is used by Burmese for all parts of houses, posts, flooring, walls, &c., is a very good, fine, strong wood, and splits with difficulty. Recommended for hand-spikes, helves, spokes and handles of tools, also for shot boxes and packing-cases.—*Dr. Brandis, Cal. Cat. Ex.* 1862, *Thwaites, p.* 16, *Captain Dance.*

CSL

Y

YA-KA-NGI-NE, Burm. A tree of Moulmein, wood used in ordinary house-building.—*Cal. Cat. Ex.* 1862.

YAKAULEY, Tam. ? A Tinnevelly timber, of a light brown colour, used for building purposes.—*Col. Frith.*

YAMANEE, Burm. A tree on the hills of Tenasserim, which furnishes a remarkably light, white timber, resembling moochee wood, of which the natives often make canoes. The Karens say it bears a yellow flower, and a small plum, which is a favourite food with the barking deer.—*Dr. Mason. See* Yemmanee.

YAMANI, Burm. A tree of Moulmein, wood used in ordinary house-building.—*Cal. Cat. Ex.* 1862.

YAMMANDY, Burm. In Amherst, a useful and valuable wood, used for carving images and making drums.—*Cat. Ex.* 1851.

YANGY, Tam. A Tinnevelly timber of a light brown colour, used in wheel-wrights' work.—*Colonel Frith.*

YARVINEY, Tam. Crawn in the Portuguese and Dutch of Ceylon. This Ceylon tree grows tall and straight, from twenty to forty-five feet high, and from twelve to thirty inches in diameter. It may be obtained in great quantities, and answers many purposes in ship and house-work.—*Edye on the Timber of Ceylon.*

YA-THA-NAT, Burm. A tree of Moulmein. An inferior wood for boats, which lasts but two or three years. The fruit is an article of food.—*Cal. Cat. Ex.* 1862.

YA-THA-PYA, Burm. A tree of Moulmein, wood used for house-building purposes. The fruit is edible.—*Cal. Cat. Ex.* 1862.

YA-THIT. In Pegu, Dr. McClelland says, the cutting of Ya-thit should, as far as practicable, be prohibited. He adds that however desirable it may be to forbid or enforce such a rule, he is at a loss to know how much impediment can be attempted or laid without stopping the trade of yard-pieces, which are just as much in demand as mast-pieces. He is of opinion that a large consignment of timber might be realized, and duty received on them, and it will facilitate the growth of the under-sized trees.—*Selection Records of Government of India, Foreign Department, No. IX, p.* 47.

YEENGA, Burm. A small timber tree, very abundant at Moulmein and scattered over the Tenasserim provinces. Its maximum girth is 2 cubits and maximum length 15 feet, and it sinks in water when seasoned. It is a very pretty white wood for furniture, and is used by the Burmese for helves and for mamoties, and though not so strong as Chisel-handle-tree, it possesses similar properties, though in an inferior degree. It sells at Rs. 45 per 50 feet by 1 foot square.—*Captain Dance.*

YELLAREE, Tel. This wood of the Nalla Mallai is used in small quantities, but it appears a useful wood: it is of a light brown colour with a good grain.—*Mr. Latham.*

YERRA POLEEKI, Tel. Major Beddome thinks this is the Sterculia urens. It is a hardish wood of the Nalla Mallai of a red colour and very useful.—*Mr. Latham.*

YELLOW-WOOD. In England, there is a fine East India wood thus called, it appears to be larger and straighter than box-wood, but not so close-grained. Holtzapfel thinks it would be found to be a valuable wood for the arts.—*Holtzapfel.* Dr Gibson thinks this is the Nauclea cordifolia.

YEMMANEE, Burm. This tree is very abundant. The Karens say, it bears a yellow flower and a small plum which is a favourite food with the barking deer. It is found on the hills of Tenasserim, inland near the banks of the Gyne and Attaran rivers, and at the back of the mountains near Moulmein. Its maximum girth is 4 cubits and maximum length 20 to 30 feet. It furnishes a remarkably light white timber resembling moochee wood, which, when seasoned, floats in water. It is a slightly scented wood, free from cracks and the lightest of Captain Dance's collection, who mentions that it is quite free from acid or from a tendency to rot. It is very durable: the Burmese often make canoes of it and use it for boats, and it is employed by the king of Ava for his carved furniture. Captain Dance says it is excellent for fuzes.—*Dr. Mason's Tenasserim, Captain Dance.*

YENG-BYWOM, Burm. Employed in Amherst for house-posts. It is a useful wood, equal to Jarool.—*Cat. Ex.* 1861.

YENG-TAIP, Burm. In Amherst, it is a strong useful wood for posts and common carpentry.—*Cat. Ex.* 1861.

YETHA-BYAY. This Amherst wood is used for house-posts and boat-building; it is a strong wood, suited for door-frames and common carpentry.

YEW-WOOD. A tree of the Mehra forest, near Abbottabad, Hazara. Natural order, *Taxinidæ.*—*Cal. Cat. Ex.* 1862.

CSL

IN-YO. A tree of Moulmein. A strong wood, good for building purposes.—*Cal. Cat. Ex.* 1862.

YOGA-THEET, BURM. A timber tree of Amherst. This wood is used for carved images, and the bark used as soap.—*Cat. Ex.* 1861.

YOMAH MOUNTAINS. Dr. McClelland mentions that these, the central chain of Burmah proper, are extended into Pegu and form the spine, as it were, of the province with the valley of the Irrawaddy on the west, and that of the Sitang on the east; and the several minor valleys lying between the offshoots by which the chain is terminated on the south, as the valley of the Zamayee or Pegu river, the valley of Hlaine or Line river, together with the intermediate valley of the Phoungee river or Paizoondoun creek, lying between the Hlaine and Pegu rivers. One of the most southern points of the Yomah lies between the Hlaine and Paizoondoun, of which the Pagoda hill at Rangoon may be considered the last elevation, marking the direction of the chain or line of local disturbance. The most elevated portion of the Yomah chain appears to be that from whence these southern branches radiate, where the Oakkan and Thounzai Choungs derive their source, falling into the Hlaine rivers on the west, and the Zamaee and Phoungyee rivers, on the east and south. This part of the chain, Dr. McClelland estimates at about 2,000 feet above the sea, presenting steep and inaccessible declivities.—*Dr. McClelland, Selections Records of Government of India, Foreign Department, No. IX, pp.* 6 *and* 7.

YOUNG-THA, BURM. This tree is found in moderate quantities along the sea coast near Tavoy and Mergui. Its maximum girth is 3 cubits and maximum length 30 feet. The seasoned timber sinks in water. It is a heavy durable wood, used for posts and planks of houses, and not bad for planes or handles, though surpassed for these by other woods of Amherst, Tavoy and Mergui.—*Captain Dance.*

YOW-MA-LAY, BURM. In Tavoy, a strong, heavy, rough, white wood; used for house-posts.—*Mr. Blundell.*

Z

ZALACCA EDULIS. The light boats in which the Selung race of the Mergui Archipelago shoot over their waters, owe their buoyancy to the stems of the edible Zalacca, which form their sides. These stems are as light as, and of the consistency of, cork for which they are often substituted; and the Selung are skilful in uniting them together to serve instead of planks, so as to make an unequalled sea boat, that floats on the waves like a swan.—*Dr. Mason's Tenasserim.*

ZAN-GYEE-OAT-DOUP, BURM. Oak-leaved Pollypod. (?) A tree of Moulmein, used for all ordinary purposes of building. Fruit used medicinally.—*Cal. Cat. Ex.* 1862.

ZA PA-DRUP, BURM. A tree of Moulmein, a strong wood, good for building purposes.—*Cal. Cat. Ex.* 1862.

ZEE-BYION. A compact, close-grained Amherst wood, like Lagerstrœmia, or white Jarool. It is used for house-posts, is liable to split, but is free from the destructive influence of insects.—*Cal. Cat. Ex.* 1862.

ZIN-PYUN GYEE, BURM. A tree of Moulmein; wood used in ordinary house-building.—*Cal. Cat. Ex.* 1862.

ZIZYPHUS, *Species.*

Zi-thi. BURM.

Grows in Tavoy, and yields a hard and durable wood.—*Dr. Wallich.*

ZIZYPHUS, *Species.*

Contaya-kulli. TEL.

This large creeper, common in Ganjam and Goomsur, has a circumference of 1½ feet. The charcoal used in making country gun-powder is made by burning this tree. The chatty used in pacottahs is placed in a frame-work made of this.—*Captain Macdonald.*

ZIZYPHUS FLEXUOSA.

Sinjli. KAGHAN.

A tree of Kashmir.—*Powell, Hand-book, Econ. Prod., Punjab, .p.* 602

ZIZYPHUS GLABRATA, *Heyne.*

Zizyphus trinervia, *Roxb.; Fl. Ind.*

Kurkutta wood. ENG.	Karukuva. TAM.
Ran-bor. MAHR.	Karaka maram. TAM.
Kurkatta maram. TAM.	Kakupala. TEL.

This tree grows in the peninsula of India. In the Bombay presidency, it is most common on cultivated lands and in alluvial soil on the banks of rivers. It is less common on the Bombay sea coast, than inland. Dr. Wight had seen trees, in Coimbatore, that would yield 12-inch planks, but it is commonly a moderate-sized tree, though its timber, of a light brownish colour, is excellent, hard and close-grained and takes an excellent polish. It is used for ploughs. The bark affords a quantity of kino like gum, both by exudation and by decoction.—*Drs. Wight and Gibson, Voigt, Major Beddome.*

GSL

ZIZYPHUS JUJUBA, *Willde, Lam.* ; *Roxb.* ; *W. and A.*; *W. Ic.*

Zizyphus sororia, *Schult.*
Rhamnus jujuba, *Linn, Rheede* ; *Rumph.*
var.
Z. hortensis.
Z. Hysudricus.

Lotus of the Ancients.
Pomum Adami of Marco Polo.
Ziruf. AR.
Ussli suddir. AR.
Koolgach. BENG.
Bher. BENG. HIND. MAHR.
Kul. ,,
Hyi-bin. BURM.
Elanji mara. CAN.
Guly mara. ,,
Jujube tree. ENG.
Bor. MAHR.
Elentha. MALEAL.
Perin todali. ,,
Berra. PASHTU.
Masan, Port of Ceylon.
Maha-debara. SINGH.
Illana. TAM. of Ceylon.
Yellandy maram. TAM.
Ellendi. ,,
Regu manu. TEL.
Ganga regu. ,,
Regu chettu. ,,
Karkandhava. ,,
Renga. ,,

The fruit.

Unab. AR.
Ber ka phal. DUK.
Budderic. SANS.
Elandei pallum. TAM.
Regu pandu. TEL.

This tree is found in Ceylon, throughout British India, and in Sunda and the Moluccas, in the Archipelago, but growing to various dimensions. In the Western Himalaya it rises to 3,000 and 4,000 feet in height, and is to be seen with 10 feet of girth, one in the Shalimar gardens being nearly of that girth. Mr. Masson found the Ber tree generally throughout the tract between Saiyad Wala and Lahore, a distance of 40 miles, not confined to the vicinity of villages, and attaining a much larger size than he had elsewhere seen, as also does its fruit, which he found sweet and palatable. In the Bombay presidency, Dr. Gibson failed to find any specific difference between the wild and cultivated species. It grows there to a large size, fit for planks or sleepers, for which latter it might answer well in the dry climate of Sind, where the tree is common, but sleepers made of it do not suit the moister climates. In Coimbatore, it is usually of small size, but the dark-brown wood is fine grained, strong and hard, tough, heavy, durable, and tolerably strong and fitted for cabinet-making purposes, for saddle-trees, implements of husbandry and sandals, and might be suited for engraving. In the Panjab and in Kanawar it is used for tent pegs, well-curbs ; well-wheels ; ploughs ; combs ; clogs ; charpais ; saddle-trees and charcoal. In Burmah, it is scarce, only found near large towns, rarely in the Pegu and Tounghoo forests. The bark is used by tanners : women wash their hair with a lather raised from its leaves. Lac and cocoons are formed on it.—*Drs. Gibson, Wight, Cleghorn, J. L. Stewart, and McClelland, Masson, Vol. I, p.* 406, *Voigt, p.* 145. *Thw., Messrs. Latham, Powell, and R. Thompson, Captain Beddome, Lieut.-Col. Lake, Commissioner, Jhullundhur Division.*

ZIZYPHUS KUTBER.

Kutber.

In Kumaon, a small thorny tree yielding a light, tough and durable wood.—*Mr. Thompson.*

ZIZYPHUS LUCIDA, *Moon.* In the Matela and Kornegalle districts of Ceylon, very abundant.—*Thw. En. Pl. Zeyl., I, p.* 74.

ZIZYPHUS NUMMULARIA, *W. et A.*

Z. microphylla, *Roxb.*
Z. rotundifolia, *Lam.*
Rhamnus nummularia, *Burm.*

Birar of Beas.
Jand-ber of Jhullundhur.
Ber ; Birota of Salt Range, Sutlej and Ravi.
Malla, Kokni-ber ; mara-ber, Jhar-beri, Zari, HIND. of Panjab.
Karkanra. PUSTHU.

A hedge-plant of the Panjab.—*Dr. J. L. Stewart, Major Beddome.*

ZIZYPHUS WYNADENSIS. A lofty tree of Wynaad, with a hard wood.—*Captain Beddome in M. L. S. J.*

ZIZYPHUS XYLOPYON, *Ghatoo*, HIND. Mr. Jacob mentions a tree under these names as common in all the jungles of Central India, never straight, and he had never seen the timber worked.—*Mr. Jacob.* (*Note.*—This botanical name seems incorrectly printed ? It seems to be the next).

ZIZYPHUS XYLOPYRUS, or X. Glabra ? Ghattoo, HIND.? Under these names, as a fine large tree of Jubbulpore, there was sent to the Exhibition of 1862, a scarce wood, but close-grained and excellent.—*W. Jacob, Esquire, C. P., Cal. Cat. Ex.* 1862.

ZIZYPHUS XYLOPYRUS, *Willd.* ; *Roxb.* ; *W. & A.*

Zizyphus elliptica, *Roxb.*
" caracutta, *Roxb.*
" orbicularis, *Schult.*

Guman mara. CAN.
Ghont. HIND.
Guti. MAHR.
Goti. TEL.
Gatto chettu. TEL.
Gotte chettu. ,,

This tree grows in Ceylon, is common throughout most jungles of the south of India, and can always be recognized by the pale colour and softness of the under-surface of its leaves. It is most common below the ghauts in Canara and Sunda, but it never grows to a very large size. Its hard, durable, yellow wood is used for torches, buildings and implements, and its fruit is employed in the arts, being much used by shoe-makers to blacken leather and to make blacking.—*Dr. Gibson, Roxb.*, i, 610, *Voigt.* 45, *Thw., p.* 74.

TIMBER AND FANCY WOODS OF EASTERN AND SOUTHERN ASIA.

Dr. Wallich is the only author that can be quoted on the subject of the woods of Asia generally, and I give his Catalogue here, as furnishing the places of growth, the weight per cubic foot and specific gravity of about 200 of the woods of which I have already given the list.

NAME.	Place of growth.	Weight per cubic foot.		Specific gravity.
		lbs.	oz	
1 Acacia—? (Popeeah) ..	Tavoy, ..	23	3	.371
2 do. do. ..	do. ..	23	3	.371
3 Ægle marmelos (Bellee). ..	Ceylon, India	49	1	.784
4 Anacardium latifolium, Bhela	Gaulpara, ..	37	0	.592
5 Andrachne apetala, ...	India, ..	33	14	.542
6 Artocarpus chaplasha, ..	do. ..	34	12	.556
7 Artocarpus hirsuta (Anjelly-wood), ...	Cochin, ..	36	14	.590
8 Artocarpus integrifolia (Jack wood), ...	Travancore, ..	35	10	.570
9 Artocarpus—? (Py-nya-the Tanabeng), ..	Tavoy, ..	..		..
10 Aultoovanchee, ..	Travancore, ..	31	6	.502
11 Auyanuy, ...	do. ..	32	11	.523
12 Averrhoa carambola, ..	India, ..	39	11	.635
13 Bah-nah-thoa, ...	Tavoy, ..	..		..
14 Betula Bhojpattra, ..	Nepal, ..	35	5	.565
15 Bignonia chelonoides, ..	do. ..	42	8	.680
16 Bignonia—? (Thathee), ..	Tavoy, ..	49	8	.792
17 Bignonia (Thuggainee), ..	do. ..	40	4	.644
18 Cadooca Marum, ..	Travancore, ..	38	3	.611
19 Calophyllum—? (Thurappe; chopee), ...	Martaban, ..	43	0	.688
20 Cambagum, ...	Travancore, ..	28	11	.459
21 Canoo, ...		36	0	.576
22 Canual, ...	Travancore, ..	47	6	.758
23 Cannao, ...	do. ..	58	7	.935
24 Caragagaloo, ...	do. ..	33	0	.528
25 Carapa—? (Tal-la-oon), ..	Tavoy, ..	36	0	.576
26 Careya—? (Kaza), ..	Martaban, ..	46	0	.736
27 Careya (Kombo), ..	Gaulpara, ..	42	12	.684
28 Caringosha, ...	Travancore, ..	45	5	.725
29 Carivagah	do. ..	33	10	.538
30 Caroogha, ...	do. ..	44	10	.714
31 Caroo Maram, ...	do. ..	47	11	.763
32 Carintha, ...	do ..	34	4	.548
33 Cassia, ...	India, ..	41	9	.661
34 Castanea indica, ..	do. ..	39	0	.624
35 Castanea tribuloides (Coteor chisee, Makoo; shingali).	Nepal, ..	62	0	.992
36 Catunguiu, ...	Manilla, ..	42	11	.683
37 Caultoo mooroonga, ..	Travancore, ..	45	14	.734
38 Ceder, ...	India, ..	25	2	.402
39 Cedrela toona (Toon, Tunga, Poma Jeea), ...	Gaulpara, ..	36	0	.576
40 Cedrela toona (Toon, (Tunga, Poma Jeea), ...	India, ..	32	9	.521
41 Chambagum, ...	Travancore, ..	37	11	.603
42 Chana, ...	do. ..	20	7	.327
43 Chinchona gratissima (Tungnusi), ...	Nepal, ..	23	0	.368
44 Chorangaree, ...	Travancore, ..	29	11	.475
45 Cæsalpinea sappan (Sappan)	do. ..	60	14	.974
46 Coomboo], ...	do. ..	31	14	.510
47 Coturaba, ...	Ceylon, ..	23	5	.373
48 Cou-moo, ...	Tavoy, ..	..		
49 Cynometra polyandra, ..	India, ..	52	10	.842
50 Cynometra—? (Maingya), ..	Martaban, ..	48	7	.775
51 Dalbergia lanceolaria (Neddoon Nedum, Nander-wood)	Ceylon, ..	45	7	.727
52 Dalbergia latifolia (East India ebony), ...	India, ..	66	8	1.064
53 Debool, ...	Ceylon, ..	38	3	.615
54 Diospyros melanoxylon (Black ebony), ...	.. ..	61	2	.978
55 Diospyros racemosa ..	India, ..	34	11	.555
56 Diospyros—? (Kyamuchia choomullo), ...	Martaban, ..	50	3	.803
57 Dipterocarpus—? (Kunnean phew), ...	Tavoy, ..	25	3	.403
58 Domba, ...	Ceylon, ..	33	3	.531
59 Dombeya melanoxylon (St. Helena ebony), ..	St. Helena, ..	71	9	1.145
60 East India Ebony. See Dalbergia.				
61 East India Rosewood, ..	India, ..			
62 Ehretia lævis, ...	Botanic Garden, Calcutta			
63 Ekebergia—? (Jiyakohi), ..	Gaulpara, ..	39	1	.625
64 Eleocarpus serratus (Weraloo), ...	Ceylon, ..	33	8	.536
65 Eriobotrya japonica (Loquat)	India, ..	46	11	.747
66 Eugenia malaccensis (Jamboo), ...	Ceylon, ..	30	4	.484
67 Eugenia malaccensis (Jamboo), ...	do. ..	30	14	.494
68 Excœcaria, ...	Tavoy, ..			
69 Fagræa fragrans (Annahbeng, Burin), ...	Martaban, ..	52	8	.840
70 Ficus—? Thubbeo), ..	Tavoy, ..	21	0	.336
71 Gadeboo, ...	Ceylon, ..	21	3	.339
72 Galloopah, ...	Travancore, ..	53	0	.848
73 Garcinia—? (Pullowa), ..	Tavoy, ..	45	8	.728
74 Garcinia—? (Purrah wah), ..	do. ..	45	8	.726
75 Gmelina arborea, ..	India, ..	32	3	.515
76 do. do ..	do ..	32	6	.516
77 Go-na, ...	Ceylon, ..	24	8	.392
78 Gordonia—? (kaza), ..	Martaban, ..	37	10	.602
79 Guacua, ...	India, ..	41	14	.670
80				
81 Gundrucy	India, ..	34	15	.559
82 Heritiera—? (Soondree), ..	do. ..	57	15	.927
do. do. ..	do. ..	49	15	.799
83 Hibiscus macrophyllus, ..	Tavoy, ..	27	13	.445
84 Hibiscus macrophyllus, ..	do. ..	28	0	.448
85 Hibiscus, ...	do. ..			
86 Hopea floribunda (Tautheya)	do. ..	27	11	.443
87 Hopea odorata (Tengaun Thaeu goung), ..	Martaban ..	38	0	.608
88 do. do do ..	Tenasserim Coast, ..	40	12	.652
89 Hune, ...	Burmah, ..			
90 Indian Wood, ...	do. ..	45	6	.726
91 Jecah, ...	India, ..	36	11	.587
92 Juglans pterococca, ..	do ..	39	14	.638
93 Juniperus excelsa (cedar of Himalaya), — ..	.. ..	34	7	.551
94 Kaantha, ...	Tavoy, ..			
95 Kain-tha-pogee. See Symplocos.				
96 Kaunzo-kurro, ..	do. ..	43	0	.688
97 Kaza. See Careya, also Gordonia.				
98 Keahnann, ...	do. ..			
99 Kenza Perroun, ..	do. ..			
100 Kuddoot-alain, ..	do. ..	53	3	.851
101 Kuddoot-nee, ...	do. ..	34	0	.554
do. do. ..	do. ..	34	3	.547
102 Kunneen-keunkee. See Bignonia, ...	do. ..			
103 Kunneen-keunla. See Symplocos, ...	do. ..			
104 Lagerstrœmia reginæ, ..	India, ..	46	8	.744
105 Lagerstrœmia—? (kuenmounee; Pemua), ..	Tavoy, ..	37	9	.601
106 Laurus camphora? Camphor wood	China, ..	35	14	.573
107				
108 Laurus—? (Kayzai), ..	Tavoy, ..	43	3	.691
109 Laurus—? (Kullowa, also kurrowa), ...	.. ..	30	0	.480
110 do. do. ..	Tavoy, ..	30	0	.480
111 Laurus—? (Lumpatch, Chaapoo), ...	Nepal, ..	34	0	.544
112 Laurus—? (Panatha), ..	Tavoy, ..	43	0	.688
113 Laurus—? (Sassafras), ..	India, ..	32	12	.524

NAME.	Place of growth.	Weight per cubic foot.		Specific gravity.
114 Laurus – ? (Thuggoo),	Tavoy,			
115 Manga chapui,	Manilla,	41	15	.671
116 Maroothee,	Travancore,	37	7	.599
117 Maunthaen or Sassafras,	Tavoy,	36	10	.586
118 Maymaka,	India,	51	12	.828
119 May rang,	Tavoy,	48	9	.777
120 Mergeongee,	do	38	16	.617
121 Melia Azadirachta,	India,	46	1	.739
122 Metrosideros vera (iron wood),	China,	53	0	.848
123 Mimosa odoratissima,	India,	45	6	.726
124 Mimosa polystachya,	Botanic Garden, Calcutta	32	0	.512
125 Mimusops Elengi,	Tavoy,	46	0	.736
126 Moluve or Moloba,	Manilla,	51	3	.819
127 Moonga Vallah,	Travancore,	38	5	.613
128 Mootoocorandy,	do.	38	13	.621
129 Morinda citrifolia,	Botanic Garden, Calcutta	28	10	.458
130 Morung saul. See Shorea,				
131 Munha cadamboo,	Travancore,	38	15	.623
132 Murraya ? (Maikay),	India,	60	13	.973
133 Myrsine capitellata,	Nepal,	21	11	.349
134 Nar, or sacred wood,	Ceylon,	55	0	.880
135 Neerovallum,	Travancore,	24	5	.389
136 Nelle,	Ceylon,	34	8	.552
137 Netty, or Nelly.	Travancore	42	5	.677
138 Nerium tinctorium,	India,	39	14	.638
139 Nun Poungoo,	Travancore,	56	15	.611
140 Odina Wodier,	India,	41	0	.656
141 Osyris peltata (Phaoun),	Tavoy,	29	10	.474
142 do do	India,	30	8	.488
143 Pah-doubh	..	60	0	.960
144 Palah	Travancore,	14	9	.230
145 Palai,	Borneo,	23	13	381
146 Palm,	India,	57	9	.921
147 Palmist,	do.	62	7	.929
148 Panacha,	Travancore,	44	14	.718
149 Peu lay oun,	..	32	0	.512
150 Penlaly peen	Tavoy,			
151 Peroo-marum,	Travancore,	27	14	.446
152 Pieu-mah-ne,	Tavoy,			
153 Pieu-mah-pue,	do			
154 Pierardia ? (kunna, also kuzzo),	do	37	12	.604
155 Pinus dammara,	do	39	0	.627
156 Pinus longifolia	Nepal,	..		..
157 Pinus Webbiana,	..	21	0	.336
158 Poomaram	Travancore,	29	8	.472
159 Poomdroo	do	40	13	.653
160 Poonah,	do	50	15	.815
161 Pothiree,	Travancore,	35	4	.564
162 Premna hircina (chikagumbhari)	Gaulpara,	43	0	.691
163 Psidium pomiferum (Guava)	Travancore,	44	3	.704
164 Pterocarpus santalinus (Red Sanders)	India,	46	14	.750
165 Pterocarpus ? (Thounkheea)	Martaban,	51	9	.826
166 Pterospermum indicum (Amboyna),	East India Islands.	39	10	.634
167 Quercus Amherstiana, Tirbbae, Ryakle,	Martaban,	57	10	.922
168 Quercus fenestrata,	India,	47	0	.752
169 Quercus lanceæfolia,	do.	41	10	.666
170 Quercus lappacea,	do.	51	4	.820
171 Quercus semecarpifolia (Ghese cusroo)	Nepal,	22	0	.352
172 Regal wood,	Thibet	54	6	.870

NAME.	Place of growth.	Weight per cubic foot.		Specific gravity.
173 Rhizophora decandra,	India	46	6	.736
174 Rottlera ? (keounlae,)	Tavoy,	37	9	.601
175 Sandoricum – ? (Thittoo.)	do.	28	6	.454
176 Santalum album	India,	47	13	.765
177 Sapotea ! (Palaepean),	Tavoy	41	0	.656
178 Scytalia longa	India,	44	8	.712
179 Scytalia trijuga,	do	60	0	.960
180 Scytalia – ?	do	39	6	.630
181 Shorea robusta (Indian saul)	do	52	10	.842
182 (Morung saul)	Nepal	43	14	.702
183 ..	do.	45	14	.734
184 Sonneratia ! (Thaumina),	Tavoy,	42	0	.672
185 Sophora robusta,	India,	42	4	.676
186 Sterculia ? (Kuneenee),	Tavoy,			
187 Swietenia chloroxylon (satin wood Booroota),	Ceylon,	51	0	.816
188 Swietenia febrifuga	India,	54	14	.378
189 Symplocos floribunda,	Nepal,			
190 Symplocos ? (kaintha phogee)	Tavoy,	34	7	.551
191 Symplocos ? (kunneen keunkee, kunneen keunla)	do	34	4	.548
192 Syndesmis tavoyana (keetha	do			
193 Tantheya,	do	44	0	.704
194 Taxus virgata, (Dheyn also Lolsi),	Nepal,			
195 Tectona grandis (Teak, Taaka, Tekka),	Ceylon,	47	3	.755
196 do. do do	Travancore	42	8	.680
197 Tectona grandis (East Indian teak),	Malabar Coast	37	14	.606
198 do. do.	Moulmein,	31	9	.505
199 do. do.	do.	32	1	.513
200 Terminalia catappa,	Botanic Garden, Calcutta	32	0	.480
201 Terminalia chebula,	India,	42	10	.682
202 Terminalia citrina,	do.	60	2	.962
203 Terminalia – ? (Thaphaugo)	Tavoy,	50	5	.805
204 Ternstræmia – ? Puzzeinzwa	do.	36	7	.783
205 Tetranthera nitida,	India,	34	4	.548
206 Teutha,	Tavoy,	54	0	.864
207 Thallarwoo,	Travancore	44	0	.704
208 Thambuvoo,	do.	55	6	.886
209 Thaun-bau-po	Tavoy,			
210 Thau-baunthawlay,	do.			
211 Toun-mynga,	do.	48	0	.768
212 Thymboo,	do.	17	7	.279
213 Thymboo: Thau-baunpo	do.	17	3	.275
214 Town-pine,	do.	28	13	.461
215 Town-suggah,	do.			
216 Une,	do.			
217 Vallathorashel,	Travancore,	22	1	.353
218 Vanava,	Manilla,	42	11	.683
219 Vannee-mooringa,	Travancore	40	10	.650
220 Vateria lanceæfolia,	India,	53	15	.863
221 Vavoolagoo,	Travancore	29	4	.468
222 Velllagoo,	do.	28	8	.456
223 Vetty,	do,	49	11	.657
224 Venga	do.	47	1	.753
225 Vinnee,	do.	15	[illegible]	[illegible]
226 Vinny marum,	do.	11	3	.179
227 Vyashanthak,	do.	41	0	.656
228 White dammar lout,	India,			
229 Xanthophyllum – ? (Sapheu, Choomuna),	Martaban,	33	10	.538
230 Xylocarpus – ? (Keannan)	Tavoy,	46	9	.745
231 Zizyphus – ? (zeethee),	India,	35	11	.571

CEYLON WOODS.

The late Sir George Anderson sent me the following list of 96 *Timber Trees* in *Ceylon*, drawn up by Mr. Adrian Mendis, Mohandiram of Moorrotto, and Master Carpenter, Royal Engineer's Department.

Names. Singhalese. Botanical.	Locality. Provinces.	Weight per cubic foot.	Durability.
		lbs.	years.
A			
1 Andere. Acacia Vera.	Eastern.	71	15
2 Madetiye. Adenanthera pavonina.	Western.	56	30
3 Kebelle. Oblique Euginea.	Northern.	40	20
4 Cottamba. Almond.	W. & Southern.	38	30
5 Welipiyanna. Anissaphyllum zeylanicum.	Western and Northern.	35	40
6 Cocatiye. Aponogeton crispum.	Western.	56	30
7 Puwak. Areca nut.	Western, Eastern and Southern.	57	60
8 Patta Del. Artocarpus, sps.	Southern.	34	30
9 Cos. Jack. Artocarpus integrifolia.	South Eastern and Western.	42	25—80
10 Del. Artocarpus pubescens.	E. S. & Western	40	25—50
11 Aludel. Artocarpus pubescens.	Western.	51	35—70
B			
12 Bairiye.	Northern and Western.	57	10—30
13 Mee, Bassia longifolia.	Northern.	61	25—80
14 Petan. Bauhinia tomentosa.	Eastern.	57	
15 Luna Midelle. Common Bead tree.	Western.	15	8—20
16 Hal Mille. Berrya ammonilla.	Northern and Eastern.	48	10—80
17 Tal. Palmira. Borassus flabelliformis.	Northern and Eastern.	65	80
18 Calukeale. Butea frondosa.	Central.	38	30
C			
19 Calu *Mediriye. Calamander. Diospyros hirsuta.	Southern and Western,	57	80
20 Waldombe. Calophyllum acuminatum.	Western.	39	20
21 Gorrukeenee. Calophyllum calaba.	Western.	44	25
22 Dombe. Sweet scented Calophyllum.	Western.	40	5—10
23 Mahadan. Calyptranthes cumini.	Northern and Western.	36	20
24 Battedombe, Clove tree-leaved Calyptranthes	Western.	45	20
25 Alubo. Jambolana calyptranthes.	Central.	49	20
26 Kahatte. Careya arborea.	W. & Southern.	38	10—20
27 Davette. Carallia zeylanica.	Western.	42	25
28 Kittool. Nepara. Caryota urens.	W. & Southern	71	30—90
29 Dawol kurondu. Cassia cinnamomum.	Central.	39	20
30 Arremene. Sumatra Cassia.	Central.	57	50
31 Hedde wake. (Choecarpus pungens ?)	Western.	58	50
32 Burute. Satin. Chloroxylon swietenia.	Southern and Eastern.	55	10—80
33 Mal burute. Flowered Satin. Chloroxylon swietenia.	Northern and Eastern.	57	80
34 Nelly. Cicca disticha.	Central.	49	30
35 Cocoanut. Cocos nucifera.	Sea coast generally.	70	20—50
36 Wea warene. Cratæva religiosa,	Central.	62	60
37 Hal Mendora. Branch-flowered Cynometra.	Western.	56	8—20
38 Gal mendora. Branch-flowered Cynometra.	W. & Southern.	57	15—60
D.			
39 Nendoon. Dalbergia lanceolaria.	W. & Southern.	56	60—80
40 Daminne.	Eastern.	44	40
41 Gode parre. Toothed Dillenia.	Western.	51	60
42 Horre. Turbaned Dipterocarpus.	Western.	45	15
43 Doon. Dipterocarpus, sp.	Central.	29	50
44 Dive parre.	Western.	44	20
E			
45 Caluvere. Ebony.	N. and Eastern.	71	80
46 Kadoembeiriye. Bastard Ebony.	Western.	45	40
47 Kiri walla. Lance-leaved Echites.	Northern.	35	30
48 Book attene. Echites scholaris.	Western.	26	
49 Timbery. Embryopteris glutinifera.	Northern.	45	20
50 Walboamboo. Eugenia laurina.	Central.	36	15
51 Naw, Iron wood. Mesua ferrea.	Western.	72	10—60
52 Kiripolle. Indian fig tree, Ficus indica.	Southern.	30	20—30
53 Hunukirille. Grewia paniculata.	Southern.	44	25
54 Belygobel. Tilia-leaved hibiscus.	Western.	38	20
55 Nerreloo. Illicebrum latrum.	Central.	56	40
56 Dive ratembala. Jonesia asoca.	Northern.	58	25
57 Katie kale.	Eastern.	42	25—50
58 Murute. Lagerstrœmia reginæ.	W. and Southern	42	30—40
M.			
59 Hulanhick. Melia sp.	Central.	39	50
60 Ramenaidelle, Millingtonia, sp.	Western.	48	20
61 Sappoo. Michelia champaca.	Central.	42	20—50
62 Sooriya Mara. Mimosa.	Central.	42	20—30
63 Moone Mal. Mimusops elengi.	Southern.	61	50
64 Paloo. Mimusops hexandra.	Eastern.	68	10—70
65 Morre. Eye ball.	Central.	62	25
66 Etteiriye. Ash-leaved Murraya.	Eastern.	61	10—70

MINISTRY OF CULTURE · GOVERNMENT OF INDIA

GSL

EXPERIMENTS ON TIMBER AT ERODE, CONDUCTED BY T. B. FRENCH, ESQ.

	Names. Singhalese. Botanical.	Locality. Provinces.	Weight per cubic foot.	Durability.
	N		lbs.	years.
67	Helembe, Nauclea parvitlora.	W. & Northern.	42	40
68	Nebede.	Sou. & Western.	51	20
69	Gal morre. Nephelium, sp.	Central.	65	30
	O			
70	Koang. Ceylon Oak.	Southern.	42	5—10
71	Melle. Olax Zeylanica.	Eastern.	64	40
	P			
72	Patkeale.	Western.	42	40
73	Penebarroo.	Eastern.	61	50—90
74	Sooriya. Persian.	Central and Western.	49	20—40
75	Velenge. Pterospermum ruberifolium.	Central.	36	5—70
	R.			
76	Hirikoddol. Rhizophora, sp.	W. & Northern.	49	35
77	Cadol. Leafy mangrove, Rhizophora.	Northern and Western.	65	40
78	Pehimbive. Rhus decipiens.	Central.	68	50
79	Otte. Rottlera, sp.	Western.	36	10
	S			
80	Lawoloo. Sapota, sp.	Western.	39	10
81	Pamburoo. Limonia citrifolia.	Southern.	48	40
			lbs.	years.
82	Daanga. Long flowered Spathodea.	N. and Western.	23	
83	Telemboo, Sterculia fœtida.	Central.	26	30
84	Suvande.	Western.	56	30
85	Siyembela. Tamarindus Indica.	North Eastern and Western.	80	80
86	Teak, Ceylon. Taikke Ceylemey. Tectona grandis.	Western.	55	15—60
87	Teak, Cochin. Taikke Cotchive.	Cochin.	44	15—90
88	Teak, Maulmein. Taikke Molmine	Maulmein.	42	15—90
89	Ukbeirriye.	Southern.	51	80
90	Hal. Vateria indica.	Western.	26	10
91	Caha Milile. Vitex trifolia.	Southern and Western.	56	15—80
92	Meean Milile. Vitex trifolia.	Western.	56	20—90
93	Sappoo Milile. Vitex trifolia.	Western and Southern.	49	10—40
94	Samedera. Vitmannia trifolia.	Western.	26	60
95	Walukeene.	W. & Southern.	39	10
96	Tarrene. Webera cerifera.	Northern.	57	30

EXPERIMENTS on Timber at Erode Workshop, Madras Railway, September 1861, Conducted by T. B. FRENCH, Esquire.

The timber upon which the experiments were tried, were Teak, Vangay, Vellanagay, and Karoomaroodoo. Each piece was one inch square and fifteen inches long, and supported at each end, having a bearing of 1½ inch on the supports, so that the length unsupported was one foot.

Two pieces were placed on the supports at the same time at about three feet apart, and a bar of iron 2 inches square was laid over them, bearing exactly in the centre of each on this bar, other bars were placed transversely, so that the entire weight was on the centre two inches of the beam.

Result of Experiments.

Timber.	No. of experiments.	No. of lbs. which broke two pieces.	Breaking weight of one piece.	Remarks.
Teak..................	No. 1	1,146	573	
	2	833	416	
	3	827	413	
Average......	...	...	467	Broke short.
Vangay............	1	876	438	The Vangay was rather green.
	2	999	499½	
	3	1,196	598	
Average......	...	...	511	
Vellangay..........	1	1,350	675	Well seasoned, very tough.
	2	1,352	676	Do.
	3	1,811	905	Do white wood.
Average......	...	...	752	
Karoomaroodoo...	1	1,942	971	
	2	1,692	846	
	3	1,658	829	
Average......	...	...	881	

EXPERIMENTS on the strength of the undermentioned various specimens of Teak and other Timer produced in the Tenasserim provinces, the weights being applied by half hundred weights.

Date	Number marked on Specimen.	Number tested.	NATURE OF WOOD.	Length. Feet.	Dimensions square.	Specimens. Weight of lbs.	ozs.	drs.	Deflection. 5 Minutes with 224 lbs.	5 Minutes with 448 lbs.	5 Minutes with 606 lbs.	5 Minutes with 830 lbs.	Broke with lbs., including weights of scales and Essess. Last weight, lbs.	Last curve of deflection.	After Minutes.	Specific Gravity Temperature of the water in which immersed 79.	REMARKS.
					Ins.				224 Ins.	448 Ins.	672 Ins.	868 Ins.					
			TEAK TIMBER.														
13th Sept	1	1	Young Thounggeen killed....	3	1½	2	0	12	¼	½	13/16	1⅛	884	1⅛	½	·721	Long firm good fibre, well interlaced, but rather coarse.
" "	2	2	Zemi, very large ..	3	1½	1	9	8	½	1⅛	532-1⅜	0	543	1⅜	2	·776	Bad fibre, short and carotty.
" "	3	3	Zemi large, burnt tree ..	3	1½	1	10	8	5/16	¾	642-1⅜	0	665⅓	1⅝	3½	·600	Firm fibre, not long, but sound.
" "	4	4	Thounggeen, young tree	3	1½	1	15	12	⅜	⅝	1 3/16	714-1⅜	736⅔	1⅜	2	·727	Long, very good fibre.
" "	8		" *Padowk*" killed, seasoned...	3	1½	2	14	8	¼	½	1 1/16	1¼	930¼	1⅝	3½	1·018	Excellent fibre, but specimen knotty.
15th Sept	5	5	Thounggeen, dead tree, large.	3	1½	1	10	8	½	1⅛	0	0	543¾	1½	2½	·581	Fibre long, but coarse, and exhibiting a fine almost impalpable powder along the fibre.
" "	6	6	Thounggeen, dead tree ..	3	1½	1	10	8	7/16	⅞	0	0	594¼	1¼	2	·592	Long fibre, but not very strong.
" "	7	7	Thounggeen, very large tree, killed.	3	1½	1	14	0	5/16	⅝	⅞	1⅞	868⅛	1⅞	1¼	·696	Very good fibre, broke with long splinters.
" "	8	8	Thounggeen, large tree, killed	3	1½	1	8	0	⅝	1 1/16	0	0	459¾	1 1/16	1/12	·569	Short fibre, no splinters.
" "	9	9	Thaunggeen, young tree, killed	3	1½	1	12	0	½	1 1/16	0	0	597¾	2	1	·644	Very good fibre, promised a better result.
" "	10	10	Thounggeen, dead tree	3	1½	1	12	8	5/16	11/16	0	0	602¾	1⅛	½	·590	Good fibre, specimen imperfect.
" "	11	11	Thounggeen, large tree, killed	3	1½	2	0	0	⅜	⅝	1	1¼	984⅕	1⅞	4	·724	Particularly long, tenacious fibre, broke gradually.
" "	12	12	Thounggeen, large tree, killed	3	1½	1	14	8	⅜	⅝	⅞	1½	912¼	1¾	1¾	·693	Very good strong fibre.
" "	13	13	Thounggeen, dead tree ..	3	1½	1	13	12	½	⅞	1 5/16	0	721½	1⅞	1¾	·635	Very fine fibre, and had it been a killed tree, would have given good result.
" "	14	14	Zemi-large, killed by fire	3	1½	1	12	4	¾	0	0	0	280¾	⅞	½	·659	Short, dry, fibre, broke short.
7th Oct.	22	15	Best specimen of Zemi Timber	3	1½	2	1	0	7/16	11/16	0	0	573⅓	1	1	·688	Coarse fibre, killed when full of sap.
" "	23	16	Best specimen of Zemi......	3	1½	1	14	8	⅜	1	0	0	461⅓	1	1½	·640	Do. do. do. do. do.
" "	16	17	Thounggeen, dead tree......	3	1½	2	0	8	⅜	⅝	⅝	1	925⅕	1⅜	½	·706	Very long fibre, long splintering fracture.
" "	19	18	Thounggeen, very large tree.	3	1½	1	15	8	⅜	⅝	⅝	15/16	913⅕	1	1	·706	Very good fibre, long fracture.
" "	15	19	Thounggeen, young killed tree, best specimen......	3	1½	2	1	0	5/16	⅝	11/16	1 1/16	929	1⅛	¼	·687	Excellent fibre, long & tenacious, killed when full of sap.
" "	17	20	Thounggeen, killed, tree ...	3	1½	1	12	8	7/16	⅝	1⅛	0	743¼	1⅝	¼	·692	Very good fibre, tree killed when full of sap.
" "	18	21	Thounggeen, killed	3	1½	1	14	8	5/16	⅝	11/16	15/16	857¼	15/16	1½	·695	Good fibre, long and tenacious.
" "	21	22	Best specimen of Zemi......	3	1½	1	15	8	⅝	⅞	0	0	517⅓	⅞	2¼	·686	Long fibre, but very coarse.

Date.	Number marked specimen.	Number tested.	NATURE OF WOOD.	Length. Feet.	Dimensions, square.	Specimens. Weight of lbs.	ozs.	drs.	Deflection. 5 Minutes with 224 lbs.	5 Minutes with 448 lbs.	5 Minutes with 606 lbs.	5 Minutes with 830 lbs.	Broke with lbs., including weights of Scales and Esses. Last weight lbs.	Last curve of deflection.	After minutes.	Specific gravity, temperature of the water in which immersed 79.	REMARKS.
7th Oct.	20	23	Thounggeen, very large dead tree………………… ………	3	1½	1	15	4	5/16	4/8	6/8	7/8	915¼	2 2/8	¾	·696	Excellent, long and tenacious, broke very gradually.
" "	24	24	Zemi Timber, best specimen.	3	1½	1	14	8	11/16	0	0	0	348½	11/16	¼	·680	Short carotty fibre.
Commissariat Specimens.																	
	1	25	Thounggeen Timber………	3	1½	2	1	0	3/8	5/8	0	0	630	7/8	0	0	Short bad fibre, broke across.
	2	26	Zemi Timber………………	3	1½	2	3	8	5/8	0	0	0	404	1⅛	1		Short bad fibre, broke across.
	3	27	Zemi Timber………………	3	1½	2	3	8	11/16	1⅛	0	0	460	1½	¼		Coarse, rather long fibre, do. do.
	4	28	Zemi Timber………………	3	1½	2	2	12	4/8	13/16	0	0	550	1¼	1/10		Short fibre, broke across.
	5	29	Thounggeen Timber…………	3	1½	2	1	0	3/8	5/8	0	0	570	5/8	1/10		Coarse fibre, full of sap.
	6	30	Zemi Timber………………	3	1½	2	1	0	7/16	5/8	0	0	575	5/8	1/10		Firm fibre, but rather short.
	7	31	Thounggeen………………	3	1½	2	3	0	3/16	5/8	5/8	13/16	745½	0	3		Long fibre, broke very gradually.
	8	32	Padowk, seasoned………………	3	1¼	2	10	0	3/8	4/8	6/8	7/8	1085¾	1⅞	½	1·008	Firm hard fibre, great tenacity.
	9	33	Anan Timber………………	3	1½	2	11	0	3/8	0	0	0	460½	0	1	·932	Fibre good and firm, specimen, imperfect.

These specimens are of Timber furnished for Arsenal purposes by the Commissariat Department.

(Signed) G. W Y. SIMPSON, Captain,

Commanding Artillery, Tenasserim Provinces.

MEMORANDUM of various specimens of the Forest Timbers of the Tenasserim Provinces, tested at Moulmein by the Commissariat Department.

Numbers.	NAMES.				Specific gravity in lbs.	Breaking weight lbs.	Deflection in inches.	Girth of tree in feet.	DESCRIPTION.
	Burman.	Talien.	Karen.	Botanical.					
1	Seet..............	....	....	Acacia stipulata	48 13/16	997	2½ In.	5 to 6 ft.	These three specimens are nearly identical, corresponding with Nos. 45, 47, 48, page 132 of Dr. McClelland's report, useful for ornamental purposes. Nos. 11 and 23, subject to the attacks of insects ;- not very abundant.
11	Koko..........	Syethan.	Poomah.	Acacia, *sp.*	38	758	1 3/16 ,,		
23	Seet, No. 2...	....	....	do.	56	600	1¼ ,,		
2	Yendaik........	....	....	Dalbergia, *sp.*	83	1000	1 7/16 ,,	2½ to 3½ ,,	Strong, dense, variegated grained wood, useful for naves of wheels, block sheaves tool handles, and also for turning.
2½	Kyæ...........	....	....	Syndesmis Tavoyana...	.....	646	1⅛ ,,	2½ to 3½ ,,	Pretty coloured red wood, useful for furniture, a brittle wood.
3½	Theetsie.......	Soothan.	Kiahong.	Melanorrhea usitatissima.	61½	509	1 ,,	6 to 8 ,,	Handsome wood, particularly adapted for furniture, too brittle for most other purposes requiring strength.
10	Thabotghee...	....	....	N. O. Leguminosæ...	60	807	1¾ ,,	5 to 6 ,,	A tough wood, useful for tool handles, furniture and other purposes where larger scantling and great strength are not required.
15	Eing or Aeng.	Sooahn.	....	Dipterocarpus lævis...	46	758	1½ ,,	6 to 9 ,,	Three species of the wood oil tree, all of which are abundant, of great size and length, low specific gravity, does not stand exposure to wet and breaking weight equal to Teak, a valuable wood for house-building purposes when not exposed to wet and damp, in the latter case perishable.
24	Eingdah........	....	Talahung.	,, turbinatus....	52	747	1½ ,,		
46	Kanyeennee...	....	....	,, elatus..........	46	702	1⅓ ,,		
17	Thubbu yen..	Sookreoung	Mee.	Dillenia ornata.......	44½	808	1¾ ,,	6 to 8 ,,	A wood most plentiful, well adapted for all purposes of carpentry, house and ship-building ; strongly recommended for trial.
56	Kyet Zinbain.	Kaloonoot.	Koung.	,, scabrella.....	44½	691	1½ ,,		
58	Zinbain........	Carllow.	....	,, speciosa......	55	930	1½ ,,		
29	Meenaban.....	....	....	Pavetta Indica........	66	980	1 ,,	2 to 2½ ,,	A strong wood, useful for ornamental or cabinet work, and handles of tools, spokes of wheels and splinter bars.
25	Maneoga........	....	....	Carallia lucida *sp.* ...	44½	772	1 ,,	2 to 2½ ,,	A wood too brittle for any purposes otherwise than cabinet and ornamental work, resembles oak.
27	Bamboosy.....	Kaboosy.	Tagooyee.	Careya arborea.......	50	950	2 ,,	3 to 5 ,,	A tough wood, good for furniture and most purposes of carpentry.
33	Nubbay........	....	....	N. O. Leguminosæ..	60	795	1½ ,,	5 ,,	A handsome wood for furniture and general purposes of carpentry, also tool handles, naves of wheels, it requires a long time to season.
35	Pethan..........	....	....	Bignonia stipulata....	73½	1678	2⅛ ,,	3 to 4 ,,	The strongest wood of all the specimens, well adapted for carriage poles, splinter bars, naves of wheels, blocks and all purposes where size and great strength is required, strongly recommended.
40	Letoak..........	....	....	Vateria, *sp.*....	60	906	1¾ ,,	3 to 6 ,,	A handsome wood, plentiful ; suited for cabinet work, turning and other purposes requiring a wood of dense structure.
53	Pangah.........	Kuchas	Mourdah.	Terminalia, *sp.*........	58	1000	1¾ ,,	3 to 6½ ,,	A strong elastic wood, strongly recommended for all purposes where strength and dense structure is required.
60	Toakiah........	Chouchong	....	do.	71½	969	1½ ,,	3 to 6½ ,,	A dense structured wood ; useful as the above.
100	Therapee.......	....	....	Calophyllum Burmanni..	45	590	1⅝ ,,	5 to 7½ ,,	A useful wood for general purposes, very plentiful.
101	Paranah........	....	....	Garcinia speciosa.....	71	927	1¾ ,,	3 to 4 ,,	A handsome grained wood of too small scantling, to be of general use, also too valuable, being an edible fruit tree.
102	Pedowk.........	....	....	Pterocarpus indicus.	71	1000	2¼ ,,	5 to 9 ,,	Too well known to require comment.
103	Pyenkadoo.....	....	....	Inga xylocarpa	83	1153	2 ,,	5 to 8 ,,	Do. do do.
104	Pawoon.........	Socksone	Kathong.	Byttneria, *sp.*	72	1351	3½ ,,	5 to 8 ,,	The strongest and most elastic wood of the collection, plentiful ; most strongly recommended for gun carriage purposes, being superior, either to the Pedouk or Saul—the specific gravity given here is of a green specimen and therefore too high—if seasoned would be less than Pedouk which is another advant
105	Peemah.........	....	....	Lagerstrœmia...	38	822	1½ ,,	6 to 10 ,,	Too well known to require comment.
106	Engyeen.......	....	....	Shorea robusta..	72	1043	2¾ ,,	6 to 10 ,,	Do. do. do.
8	Tayet khya...	....	....	Castanea, *sp.*...........	37	392	1⅔ ,,	3 to 5 ,,	A soft wood resembling deal ; useful for packing cases and similar purposes.
38	Eentha.........	....	....	do.	42	738	1⅛ ,,	3 to 6 ,,	Similar to the above but stronger ; might perhaps be suited for fuzes.

MEMORANDUM OF VARIOUS SPECIMENS OF TIMBERS.

GSL

TABLE OF EXPERIMENTS, BY MR. BENJAMIN COUCH.

Instituted in order to ascertain the weight of a cubic foot of different kinds of Wood; the foreign when first imported, those of the growth of England when felled: also, the weight of each when fully seasoned; showing, at the same time, the loss sustained in dimensions during the process of seasoning.

By Mr. Benjamin Couch of His Majesty's Dock-yard, Plymouth.

Species (in the language of commerce.)	Country where produced.	What part of the tree the pieces experimented on were cut from.	Dimensions.				Weight in air, of a cubic foot avoirdupois.	
			When first planed for experiment.		When seasoned.			
			Length.	Breadth and thickness, or diameter.	Length.	Breadth and thickness, or diameter.	When first planed for experiment.	When seasoned.
			Ft. In.	Inches.	Ft. In.	Inches.	Ounces.	Ounces.
Poon	East Indies.	Butt... ...	4 0	17 diameter.	4 0	16¾ diameter.	651	576
		Top... ...	6 0	9 by 9	6 0	9 by 8⅞	771	695
Teak		Butt.. ...	4 0	12 diameter	4 0	12 diameter	662	657
		Top... ...	4 6	6½ by 6½	4 6	6½ by 6½	688	675

Barlow's Essay, pp. 9 *to* 11.

A list of the most useful of these woods of the Tenasserim Provinces selected and placed consecutively according to their relative breaking weight.

No. in List.		Burmese Names.	Breaking weight, lb.	Remarks.
35	1	Pethan	1,678	
104	2	Pawoon.........	1,351	Strongly recommended as an unexceptionable timber.
103	3	Pyenkadoo.....	1,153	
106	4	Engyeen	1,043	
102	5	Pedowk.........	1,000	
53	6	Pangah	1,000	
2	7	Yendaik.	1,000	
20	8	Meenaban	980	
1	9	Seet......	997	
60	10	Toukiah........	969	
27	11	Bamboay.......	950	
58	12	Zinbain.........	930	Good wood for general purposes.
40	13	Letoak	906	
105	14	Peemah.........	822	
17	15	Thubbu.........	808	
15	16	Eing............	758	
38	17	Eentha	738	
2½	18	Kyee	646	
100	19	Theerapee......	590	
3½	20	Theetsie........	509	

Captain Macdonald's List of Ganjam and Goomsur Woods.

Names.	Extreme height.	Circumference of trunk.	Height from the ground to the intersection of the first branch.
	Ft.	Ft.	Feet
Salwa or Sorunghee.	90	6	38
Piasalo	90	6	22
Sisoowa	45	4½	15
Kendhoo	60	4½	30
Gombharee	50	4½	18
Holondho	75	7	36
Jamo	75	7	36
Sohu.	50	6	12
Bodoka	35	3	15
Ponoso	0	0	0
Jhoontiah	45	4½	15
Koossoomo	50	4½	9
Moondomondee	60	4½	22
Orjoono	100	8	36
Mohoollo	75	8	36
Achoo	36	2½	10
Ambo	0	0	0
Kodalo	39	3	8
Mahalimbo	70	5	22
Limbo	70	5	22
Soroopottree Moee	40	2½	18
Siddha	45	4	22
Sahajo.	60	4½	30
Kaloochia	25	2½	12
Hanjhono	45	5	22
Dhamono	35	3	20
Kosee	50	4	22
Tanghauy	40	3	18
Gonharea.	45	4½	15
Pitta Kaloochia	36	3	15
Khoiro	25	2	6
Dhobo Khoiro	25	2	6
Minjharee or Paloodhana.	45	5	6
Tentoollee or Koyan	0	0	0
Sirisee	30	4½	22
Boro	0	0	0
Phasee	60	6	30
Oshrosto	0	0	0
Dhoon	45	4½	22

Names.	Extreme height.	Circumference of trunk.	Height from the ground to the intersection of the first branch.
	Ft.	Ft.	Feet
Koombee	36	3	6
Bouro	0	0	0
Baelo.	30	3	15
Soondorogoondee Komalogoondee or Bosontogondee	15	2½	5
Korunjo	36	4½	22
Soogondhee	25	2	7
Bhayroo	40	3	20
Bello	30	3	10
Borokolee.	30	3	8
Ollakolee	40	4	15
Moee	30	3	13
Behenta	30	3	10
Korada.	30	3	8
Dhobee	36	3	15
Charo	36	3	15
Poeechandea	48	5	9
Grouhonee Kubatee	30	6	12
Horedha	45	4½	20
Bahadha	50	4	10
Soonaree	36	3	10
Bhaileah	40	4	20
Dhimeree	40	4½	8
Boincho	15	1	5
Choonokolee	10	1	5
Brahmonea	15	1½	7
Sahadha	30	2	6
Gotho	20	2½	7
Gondhona	25	7½	6
Rayee	30	3	15
Ankoolo	30	2½	12
Patonwa	20	1	5
Ambaleta	12	1½	3
Kotoko	40	4	9
Potro Koorwan	20	1	5
Patolee	20	1½	12
Pamphoonea	20	1	8
Nooniaree Looniaree or Noononenea	36	4	7
Gooroohado.	22	2	10
Hinjolo	30	4½	6

Names.	Extreme height.	Circumference of trunk.	Height from the ground to the intersection of the first branch.
	Ft.	Ft.	Feet
Lodhoka Sijhoo	20	2	6
Salora	22	1	5
Khakodha	30	2	9
Khookoondea	30	2	9
Killakoorowan	20	1	6
Koeto	50	5	10
Mosanea	15	2½	4
Gongosheolee or Dondeepoholo.	25	3	7
Pendoora	20	2	1
Ambhota.	20	2	7
Kopassea	20	2	7
Potoobaolo	45	4	12
Joree	60	5	8
Chochena	60	5	9
Bokmo	36	2	8
Ghunteoh Patoolee	22	1½	10
Chorayegodee.	22	1½	6
Ambodha	30	2½	7
Kontabaolo	30	2	7
Borodha	30	2	8
Ghoralanjea or Tentara?	30	3	10
Kodumbo	80	6	32
Rooradea	12	1	3
Hadokonkalee	12	2	4
Goonaicho	25	2	6
Biahmonea	15	1½	7
Gooroobolee.	18	2	4
Kodoro	30	2½	12
Gondopolaso	45	2½	8
Sohojo Maree	25	1½	8
Mohanea	25	1½	8
Kolee Kouradea	25	1½	8
Dalosingha or Taloosinghee	25	1½	6
Meresinha	30	2½	8
Konchona	30	2½	8
Boroona	40	5½	9

Names.	Extreme height.	Circumference of trunk.	Height from the ground to the intersection of the first branch.
	Ft.	Ft.	Feet
Neraso	25	2½	8
Nagishvoro	30	3½	9
Rahana	30	1½	1
Pochoboro	30	2½	6
Ponposo Komaree	30	2	8
Kolasahajo	50	4	18
Pitolo	30	2	6
Chourecona	30	3	8
Chalodhona	30	2	6
Paneollo	40	2	8
Dharonjo	60	4	8
Beejee Kooroowan	25	2	8
Oshoko	50	3	8
Korra	50	5	20
Baygoona	21	1	5
Solopo	40	3	28
Shyalee	0	1½	0
Polaso	0	1½	0
Contayecoollee	0	1½	0
Pichoolee	0	1¼	0
Shalimbobanso	40	2½	0
Conta banso.	80	1½	0
Bolungee banso	25	⅛	0
Soondorogoyan banso.	30	¾	0
Bono Koniaree	50	3	10
Bace Dhimeree.	30	2½	8
Moddorogoodee	40	2½	8
Babolo	25	2	8
Jundamaree.	30	2½	6
Woon	60	5	5
Koromonga	36	3½	9
Dhosora Khendhoo.	60	5	18
Ambeleetoba	30	1	6
Modoroo toba	30	1	9
Kheero Kolee	30	3	6
Naringhee	30	3	7
Kossaye	22	1	7

CAPTAIN PUCKLE'S *experiments on the transverse strength of Seasoned Woods from the Forests of Western Mysore; the weight was suspended from the centre of each specimen, which was 24 inches long and one inch square, and supported at both ends for one inch—so that the bearing was just 22 inches.*

N.B.—THE EXPERIMENTS WERE PERHAPS CARRIED ON TOO QUICKLY TO GIVE THE BEST RESULTS.

No. in list.	No. of specimens.	NAMES OF WOOD.	DEFLECTION IN INCHES AND TENTHS. 1. lbs. 126.	2. lbs. 238.	3. lbs. 350.	4. lbs. 462.	Breaking weight in lbs.	Ultimate deflection.	Specific gravity.	Description.	Uses to which applied, &c., &c.	Whether likely to be attacked by insects or not.	Kind of fracture.	Average size of rough-squared log procurable, and if abundant, or not.	REMARKS.
I	1	*Can.* Boghy...	0·10	0·20	0·40	0·80	462	0·90	915	Dull brown, close grain.	For furniture, is strong, and tough.	No.	Short fibrous.	12 × 1 × ¾. Yes.	No. 2. Cracked at 630 lbs.
		Tam.													
		Lat. Acacia (probably.)	0·10	0·20	0·30	0·60	686	0·90							
	2	*Tel.*......													
II	1	*Can.* Soojhel	0·17	0·37	0·58	......	......	......	973	Bright brown, long grain, rather open.	Has great resilience—useful for all purposes.	No.	Long fibrous.	8 × ⅓ × ¾. Yes.	No. 1 Deflected 0·68 with lbs. 380—0·72 with lbs. 400—0·98 with lbs. 446—1·02 with lbs. 456—It was then unloaded, and recovered its shape all but 0·100 of an inch.
	2	*Tam.*	0·10	0·25	0·40	0·60	658	1·70							
	3	*Lat.* Acacia (probably.)	0·25	0·40	0·60	1·00	574	1·60							
	4	*Tel.*......	0·20	0·40	0·60	0·80	462	0·90							
	5	....	0·2	0·4	0·63	......	400	0·75							
III	1	*Can.* Boghy...	0·05	0·25	0·40	0·55	630	1·55	904	Light reddish brown, and with minute cavities. filled with secretion.	For carriages, and house building.	No.	Long fibrous.	12 × 1 × ¾. Yes.	Cracked at 460 lbs.
	2	*Tam.* Vaghay... ...	0·10	0·30	0·50	1·00	480	1·40							
	3	*Lat.* Acacia speciosa ...	0·20	0·30	0·50	0·60	582	1·10							
	4	*Tel.*	0·1	0·2	0·4	0·6	639	1·2							
IV	1	*Can.* Hoonsay... ...	0·12	0·38	......	......	294	0·60	1323	Heartwood is red, and black, streaked; close-grained, knotty.	For naves of wheels, oil mills, mallets, rice pounders, &c., excellent for brick and tile burning.	No.	Short fibrous.	10 × 1¼ × 1. Yes.	No. 4 Did not break quite through. No. 1 Broke in two after ½ minute's suspension, specimen bad. No. 2 Was not a fair specimen, it had a longitudinal crack; but it sustained the weight, 40 seconds. Yields the best Charcoal for Gunpowder, the stones pounded, and boiled with thin glue, make best wood cement.
	2	*Tam.* Poolia Marum ...	0·10	0·20	0·45	0·75	602	0·95							
	3	*Lat.* TamarindusIndica	0·20	0·30	0·50	0·70	486	0·80							
	4	*Tel.* Chinta Chettoo ...	0·1	0·22	0·3	......	345	0·45							
V	1	*Can.* Biti	0·10	0·20	0·40	0·60	574	0·70	818	Black, and streaked red, like rosewood, rather open grain.	Furniture of every description.	No.	Short fibrous.	18 × 1½ × 1¼. Yes very	No. 1 Broke after sustaining weight, 20 seconds. No. 2 Cracked at lbs 518, but sustained the last weight for one minute. Much larger timber is procurable in the Forests of Malabar, where it grows to a stately and handsome Tree, but in the largest specimens, earth is often found embedded. A fixed oil is procured from the seeds, and the root is medicinal. Did not break quite through.
	2	*Tam.* Yeti Marum	0·07	0·15	0·30	0·50	602	0·95							
	3	*Lat.* Dalbergia latifolia.	0·15	0·30	0·45	0·60	522	0·80							
	4	*Tel.* Eroopootoo... ...	0·1	0·2	0·4	0·6	597	1·1							
VI	1	*Can.* Honagul... ...	0·10	0·37	0·70	......	450	1·20	913	Dark straw color, compact.	Furniture&house building	No.	Long fibrous.	17 × 1¼. Yes.	No. 1 Cracked after sustaining lbs. 448 for one minute, but broke through with an additional 2 lbs. No. 2 Cracked and broke through, to neutral axis only. No. 3 Broke straight through. This is perhaps the most abundant tree in the Forests.
	2	*Tam.*	0·10	0·25	0·40	0·70	480	0·85							
	3	*Lat.* Terminalia... ...	0·10	0·20	0·35	0·55	576	0·60							
	4	*Tel.*	0·15	0·25	0·35	0. 6	569	1·00							
VII	1	*Can.* Wulla Honay ...	0·25	0·45	0·80	.....	385	1·25	1020	Light colored, open grain, an excellent timber.	Furniture & house building.	No.	Rather long and fibrous.	17 × 1¼ × 1. Yes.	A variety of the *Pterocarpus Marsupium*; this wood is lighter, but apparently as good, and does not stain yellow, as the Rugta Honay does. No. 1 Cracked in the centre, and broke (but not quite through) after sustaining the weight for a few seconds.
	2	*Tam.*	0·10	0·30	0·60	1·10	546	1·10							
	3	*Lat.* Pterocarpus... ...	0·15	0·33	0·65	1·30	574	1·30							
	4	*Tel.*	0·25	0·50	0·80	.....	406	0·90							
	5	... .	0·2	0·4	0·7	......	429	......							
VIII	1	*Can.* Nellee...	0·20	0·30	0·48	1·00	490	1·20	1080	Dark flesh color, smooth, very close grain, compact and tough.	For veneering: good for well-rings, does not decay under water, well adapted for turning.	Yes.	8 inches long & fibrous.	8 × 1 × ¾. Yes.	No. 1 Broke in 2 pieces, after sustaining the weight ½ a minute. No. 2 Scarcely broke beyond neutral axis. The fruit (Country gooseberry) is pickled and preserved: the bark is astringent and used in tanning—the young branches are often put in wells to purify the water.
		Tam. Nellee..													
		Lat. Emblica officinalis.	0·10	0·25	0·40	0·80	574	1·30							
	2	*Tel.* Assereki....													
IX	1	*Can.* Nundee.... ...	0·15	0·30	0·60	1·10	467	1·20	660	Light brown, rather open grain.	Useful for a variety of purposes, has great "stiffness"—wooden bridges have been built of this.	Yes.	Long fibrous.	18 × 1¼ × 1. Yes.	The fracture of No. 1 was a 6" long. This wood is much used in the Dockyard, but does *not* answer for sleepers, rotting quickly under ground.
	2	*Tam.* Benteak...	0·10	0·20	0·40	0·50	574	0·70							
	3	*Lat.* Lagerstrœmia microcarpa	0·10	0·25	0·50	1·20	462	1·20							
	4	*Tel.*	0·15	0·30	0·40	0·60	518	0·90							
	5	....	0·2	0·4	0·57	0·7	541	1·0							
X	1	*Can.* Billawar... ...	0·10	0·30	0·45	0·65	546	1·30	730	Handsome grain, red & brown, streaked, rather open.	Has great toughness or elasticity, makes handsome furniture, resembling walnut, and much used in carriage building for the frame work, felloes and spokes.	No.	Short fibrous.	12 × 1¼ × 1. Yes.	No. 1 Cracked at lbs. 496 but sustained 546 lbs. for a second; at the moment of fracture, it deflected 2 inches; it broke very slowly, and not quite through. No. 2 Cracked after sustaining 476 lbs., broke through at lbs. 504.
	2	*Tam.*	0·10	0·30	0·40	0·65	504	2·20							
	3	*Lat.* Acacia...	0·15	0·25	0·45	0·55	518	0·80							
	4	*Tel.*	0·10	0·25	0·40	0·60	578	0·80							
	5	....	0·1	0·2	0·3	0·5	711	1·2							
XI	1	*Can.* Rugta Honay ...	0·12	0·30	0·50	1·20	......	......	820	Do. do. but closer grain, and a little darker.	Makes handsome furniture, & resembles fine mahogany, but must be well seasoned, or it stains yellow.	No.	Short and rather splintery.	17 × 1 × 1 Yes.	No. 1 Cracked after bearing 475 lbs. for a few seconds; the weights were then taken off and the specimen remained whole. This tree, which grows to a large size, yields the Gum "Kino"—and is abundant in all the Forests of Southern India.
		Tam. Vengay... ...	0·20	0·40	0·60	0·70	518	0·70							
	2	*Lat.* Pterocarpus marsupium	0·15	0·30	0·50	..	378	0·70							
	3	*Tel.* Yegasa...													
XII	1	*Can.* Nowladdi ..	0·05	0·20	0·40	0·60	518	0·70	907	Greenish brown, dull, close grain.	Polishes well, is used for house building and furniture, &c.	No.	Long and rather splintery.	11 × 1 × ¾. Yes.	This is one of the woods used as sleepers in the S. W. Railway.
		Tam.													
		Lat.													
	2	*Tel.*													
XIII	1	*Can.* Handiga... ...	0·20	0·40	0·70	......	364	1·00	657	Light, mottled brown, long regular grain.	Furniture; polishes and turns well, useful to the cabinet maker, and would do for veneering.	No.	Splintery.	9 × ¾ × ¾. Not very.	No. 1 Bad specimen. No. 2 Cracked at lbs. 462 and broke after sustaining th[illegible]ght one minute
		Tam.													
		Lat.	0·15	0·30	0·50	1·10	462	1·20							
	2	*Tel.*													

Experiments on the transverse strength of Seasoned Woods from the Forests of Western Mysore, &c.

No. in list.	No. of specimens.	NAMES OF WOOD.	DEFLECTION IN INCHES AND TENTHS. 1. lbs. 126.	2. lbs. 238.	3. lbs. 350.	4. lbs. 462.	Breaking weight in lbs.	Ultimate deflection.	Specific gravity.	Description.	Uses to which applied, &c., &c.	Whether likely to be attacked by insects or not.	Kind of fracture.	Average size of rough-squared log procurable, and if abundant, or not.	REMARKS.
XIV	1	*Can.* Jalari	0·20	0·40	0·60	0·80	462	1·00	689	Light yellow; long fibrous grain.	Strong useful wood for a variety of purposes.	No.	Short.	10 × 1 × 1. Yes.	A large tree, which the lac insect attacks, the shell lac of commerce is procured from it.
		Tam. Talura													
		Lat. Vatica laccifera ..	0·20	0·35	0·55	...	434	0·70							
	2	*Tel.*													
XV	1	*Can.* Kurraymutti ...	0·05	0·20	0·40	1·00	462	...	892	Dark brown; open grain.	House building; bears a good transverse strain; a wood much esteemed for all Railway purposes.	No.	Rather splintery.	18 × 1¼ × 1. Yes very.	No. 1 Cracked at 406 lbs., very abundant everywhere.
	2	*Tam.* Kurray maradah.	0·10	0·30	0·50	1·00	462	...							
	3	*Lat.* Terminalia tomentosa	0·20	0·30	0·45	0·60	602	1·10							
	4	*Tel.* Muddie	0·1	0·2	0·4	0·5	589	0·1							
XVI	1	*Can.* Jambay	0·15	0·35	0·60	...	350	0·70	934	Dull dark chocolate brown, with orange tint, close grain.	Furniture, shafts, plough heads and knees, and crooked timbers in ship building, and Railway sleepers.	No.	Long.	14 × 1 × 34. Yes.	No. 1 Cracked at 550 lbs. and snapped with that weight after ½ minute. A large tree, the timber is hard, durable and in great demand. The bark is astringent, and used for dyeing black.
		Tam. Erool													
		Lat. Inga xylocarpa ...	0·10	0·25	0·65	...	406	0·70							
	2	*Tel.* Ezoovaloo.. ...													
XVII	1	*Can.* Sagwan..	0·20	0·40	0·70	...	400	...	684	Light brown, open grain.	Ship building, house do.; furniture, &c., &c.	No.	Splintery.	30 × 1¼ × 1¼. Yes very	No. 1 Broke in two, suddenly. No. 2 Snapped short in two, after sustaining weight for a few seconds. No. 3 do. do. N B.—The Nuggur Teak appears not to be so good as that of the Mysore and Malabar Forests: sometimes timber of much larger scantling is procurable, but seldom longer.
	2	*Tam.* Theke Marum ..	0·20	0·48	0·80	...	350	...							
	3	*Lat.* Tectona grandis. ..	0·20	0·40	0·60	...	406	0·80							
	4	*Tel.* Teka	0·25	0·55	...	...	322	0·70							
	5	. . . .	0·2	0·4	...	...	387	0·5							
XVIII	1	*Can.* Dinduga... ...	0·15	0·35	0·70	...	406	0·80	1037	Close compact grain, yellowish, striped, and something like satin wood, very handsome.	House building, shafts and yokes, and general use for Railway purposes but makes very good cabinet furniture.	No.	Splintery.	12 × ¾ × ¾. Yes very.	Snapped like the preceding, but is much used in Bangalore.
	2	*Tam.* Vella Naga ...	0·15	0·30	0·50	...	406	0·80							
	3	*Lat.* Conocarpus latifolia	0·25	0·40	0·65	0·90	510	1·25							
	4	*Tel.* Siri Maun	0·1	0·3	0·5	0·7	513	0·8							
XIX	1	*Can.* Kuddavailoo ...	0·10	0·35	0·80	...	378	0·90	681	Brownish yellow, close compact grain, tough.	For various kinds of furniture.	Yes.	Splintery.	12 × 1½ × ¾. Yes.	Snapped like the preceding. A large and ornamental tree which yields extensive shade.
	2	*Tam.* Vella Cadambay.													
		Lat. Nauclea cadamba.	0·15	0·60	..	...	294	0·60							
	3	*Tel.* Rudrakshakamba.													
XX	2	*Can.* Sumpaghy.... ...	0·20	0·50	0·90	...	350	0·90	671	Rich brown, rather close grain.	Very handsome furniture; and polishes well, grows to a very large size, has a yellow sweet scented flower.	Yes.	Splintery.	15 × 3½ × 2½. Very.	No. 1 snapped at 350 lbs., but there being a knot in the middle, it was not a fair specimen. This tree is highly venerated by the Hindoos, &c., dedicated to Vishnu, the bark is bitter and very acrid.
		Tam. Chumpaca... ...													
		Lat. Michelia champaca	0·15	0·40	0·90	...	350	0·90							
	1	*Tel.*													
XXI	1	*Can.* Mauvena	0·10	0·30	...	...	294	1·00	597	Light greyish straw, open grain, and rather soft.	For solid wheels of the country carts, and rough furniture.	Yes.	11 inches long.	9 × ½ × 1½. Very.	Snapped suddenly. The wood is sacred, and used by the Hindoos for burning corpses, a reddish brown gum resin, hardening by age, and resembling Bdellium, is procured from this tree.
	2	*Tam.* Maah Marum ...	0·2	0·3	...	...	317	0·45							
	3	*Lat.* Mangifera Indica	0·10	0·30	0·70	...	350	0·70							
	4	*Tel.* Mamada Chettoo..	0·27	0·50	0·60	...	850	0·60							
XXII	1	*Can.* Godda...	0·40	..	...	...	182	...	639	Light flesh; close, even grain.	Polishes well, and is good for turning.	Yes.	Splintery, brittle.	9 × ¾ × ¾. Very.	No. 1 Deflected much, and broke in two, almost immediately at 182 lbs. No. 2 Snapped in 3 pieces, very suddenly.
		Tam.													
		Lat. Cedrelaceæ	0·20	0·40	0·80	...	350	0·85							
	2	*Tel.*													
XXIII	1	*Can.* Bayvena...	0·30	0·70	1·00	...	294	1·00	783	Light flesh, open grain, sweet scented.	Common furniture, but it warps and splits.	No.	Long splintery.	15 × 1½ × 1½. Very.	No. 1 Cracked at 224 lbs., & broke after sustaining the last weight for 1 minute. No. 2 Broke near one end suddenly. The heart wood is good, but the branches are very apt to break, and snap off in high wind; Margosa oil is extracted from the yellowish green seeds, which are about the size of small gooseberries
		Tam. Vepa Marum ...													
		Lat. Melia azadirach...	0·20	0·60	...	...	294	1·70							
	2	*Tel.* Taruka vepa... ...													
XXIV	1	*Can.* Mussee...	0·30	0·65	...	...	280		839	Very light brown, open grain.	In general demand.	No.	Shortish and rather splintery.	10 × ¾ × ¾. Yes.	Broke near one end suddenly—near a knot.
	2	*Tam*	0·2	0·5	...	...	261	0·6							
	3	*Lat.* Lauraceæ	0·20	0·50	...	...	238	0·50							
	4	*Tel.*	0·40	0·57	...	...	238	0·60							
XXV	1	*Can.* Halasoo	...	...	...	...	112	0·30	675	Yellow at first, but on exposure, it assumes a darker tint, approaching to dull mahogany.	Furniture, chairs, tables, &c., picture frames, &c., but must be well seasoned, or it will warp and crack.	Yes.	Splintery.	12 × 1 × 1½. Yes.	No. 1 Bad specimen, broke suddenly without sustaining the weights a single moment. Broke suddenly. Produces the large "Jack" fruit. Birdlime is manufactured from the juice of the bark—and the leaves are greedily eaten by cattle, the roasted seeds are much used by the poorer people.
	2	*Tam.* Peelah Marum...	0·2	0·54	0·8	...	485	0·9							
	3	*Lat.* Artocarpus integrifolia...	0·15	0·50	...	..	280	0·70							
	4	*Tel.* Panasa...	0·30	0·60	1·00	...	350	1·20							
XXVI	1	*Can.* Yettayga	0·45	0·90	...	...	252	0·90	581	Dull yellow, close, short grain.	Polishes well resembles Box wood, and is good for turning; cracks & warps, is light & durable if kept from wet.	Yes.	Very splintery and brittle.	14 × 1¼ × 1¼. Very.	No. 2 Snapped in two like a carrot. No. 3 Do. after one minute's suspension. This is also used, but the carpenter bee attacks it very much. No. 4 the last 2 lbs. caused it to snap like the others.
	2	*Tam.* Munja Cadumbay	0·40	0·90	...	...	245	1·00							
	3	*Lat.* Nauclea cordifolia	0·40	0·75	...	...	238	0·75							
	4	*Tel.* Daduga	0·45	0·70	...	...	277	0·95							
XXVII	1	*Can.* Thengana	0·20	0·50	...	...	238	0·50	747	Light speckled, something like a nutmeg in the section; pithy.	Ridge poles for temporary roofs, aqueducts, &c. &c.	Yes.	Very fibrous.	28 × ½ × ½. Yes.	With 182 lbs. No. 1 deflected much, but it broke nearly through, after sustaining the weight (238 lbs.), and remained so, kept together by its stringy fibres, with a deflection of 3 inches: this tree produces the cocoanut oil and fibre of commerce, the leaves are used for thatching houses. Toddy is also extracted.
	2	*Tam.* Thenga Marum..	0·2	0·3	0·47	...	467	0·5							
	3	*Lat.* Cocos nucifera ..	0·10	0·30	...	...	238	0·55							
	4	*Tel.* Tenkaia...	0·15	0·40	...	...	294	0·60							

CSL

Experiments on the transverse strength of Seasoned Woods from the Forests of Western Mysore, &c.

No. in list.	No. of specimens.	NAMES OF WOOD.	Deflection in Inches and Tenths. 1. lbs. 126.	2. lbs. 238.	3. lbs. 350.	4. lbs. 462.	Breaking weight in lbs.	Ultimate deflection.	Specific gravity.	Description.	Uses to which applied, &c., &c.	Whether likely to be attacked by insects or not.	Kind of fracture.	Average size of rough squared log procurable, and if abundant, or not.	Remarks.
XXVIII	1	*Can.* Somy	0·20	0·30	...	...	...	...	...	Handsome red, rather open grain, but it warps and cracks.	Furniture.	No.	Splintery.	Yes.	Neither specimen good.
		Tam....													
		Lat.	0·30	0·60	...	...	294	0·80							
	2	*Tel.*													
XXIX	1	*Can.* Baulay.	...	...	...	...	...	..	1200	....	....	No.		Yes.	
		Tam. Toombra. ...													
		Lat. Diospyros melanoxylon													
		Tel. Toomida... ...													
XXX	1	*Can.* Thadsal	0·10	0·20	0·30	0·60	558	0·90	...	Light, close even grain		Yes.	Straight, short fibrous.	16×1¼×1. Yes.	Apparently a very excellent wood.
	2	*Tam.*	0·12	0· 3	0· 4	0· 7	533	0· 8							
	3	*Lat.*													
		Tel....													

Experiments on the transverse strength of Seasoned Woods from the Forests of Western Mysore; the weight was suspended from the centre of each specimen, which was 24 inches long and one inch square, and supported at both ends for one inch—so that the bearing was just 22 inches.

No. in list.	No. of specimens.	Names of wood.	Deflection in inches and tenths. 1. lbs. 126.	2. lbs. 238.	3. lbs. 350.	4. lbs. 462.	Breaking weight in lbs.	Ultimate deflection.	Specific gravity.	Description.	Uses to which applied, &c., &c.	Whether likely to be attacked by insects or not.	Kind of fracture.	Average size of rough squared Log procurable, and if abundant or not.	Remarks.
	1	Satin wood	0·25	0·43	0·62	...	510	...	...	Light yellow long fibrous grain.	Makes handsome furniture.	No.	Long and rather splintery.	9 × 10 × 9. Yes.	
	2		0·31	0·43	0·62	100	489	...	...						
	3		0·37	0·62	...	...	329	1·12	...						
	1	Trincomallee ...	0.18	0·31	0·56	0·81	550	1·06	...	Light flesh colour, smooth, Fibrous close-grained.	Furniture and Coach-building.	No.	Short and splintery.	21 × 1 × 1. Yes.	
	2	....	0·18	0·37	0·50	0·81	510	1·12	...						

N. B.—The size of the logs is under, rather than, overstated.

Extra experiments with woods of large scantling.

Name.	Scantling.	Weights suspended in lbs.	Deflection in inches.	Remarks.
Hoonagul.	15' × 3" × 5.	1058	2	On previous occasion, this piece of wood was suffered to remain 5 weeks with a weight of 1,600 lbs. suspended from the centre and exposed to alternate rain and sun. The deflection was three inches, but when the weight was removed, the wood regained its original position.
		1658	3	
		1858	3¼	
		2258	4	
		2558	4½	
		2782	5	
		3006	5½	
		3230	7½	Commenced to crack and broke after six minutes' suspension, at a small knot a foot from the centre.
Kurramuttee	15' × 3" × 5.	1058	1½	
		2258	3	Commenced to crack and broke 1¼ feet from the centre after two minutes' suspension, not a good specimen.

J. PUCKLE, Captain,
Assistant to Chief Engineer in Mysore.

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Abies kæmpferi, syn. of Pinus kæmpferi, *Lambert.*
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Experiments to test Comparative strength of Timber procurable on the Malabar Coast.

Beam supported at both ends and loaded in the middle and deflection taken there.

1st quality Teak, Price from Rs. 8 to 25 per Candy.

Weights.

No. of experiments.	Size of Beam.	Weight.	Distance between bearing.	60	116	172	228	284	340	396	452	508	564	676	732	788	844	900	956	984	Remarks.
1	7'0" × 2" × 2"	10" 00	6·0" def.	0·2	0·37	0·55	0·70	0·90	1·10	1·27	1·45	1·65	1·83	2·25	2·45						
2	Do.	11" 00	do. def.	0·1	0·32	0·48	0·62	0·77	0·90	1·10	1·25	1·40	1·55	1·95	2·17	2·45	2·86	3·35	3·60	·30	
3	Do.	10" 00	do. def.	0·18	0·33	0·48	0·62	0·77	0·90	1·08	1·23	1·39	1·53	1·88	2·10	2·40	2·70	3·18	3·78	·18	

Round Timber, price per Candy 4-8-0.

ERROOL.

I find this Timber will not stand hard driving, it is very liable to fly; have to use a rope wad between *Ram* and pile head, it is well adapted for large bearing Beams, Timber Bridges and excellent for Sleepers; it has but little or no sap, would make good Keys and Tree-nails.

Weights.

No. of experiments.	Size of Beam.	Weight.	Distance between bearing.	60	116	172	228	284	340	396	452	508	564	620	648	676	704	732	760	788	816	844	872	900	928	956	984	1012	1040	Remarks.
1	7'0" × 2" × 2"	13" 00	6·0" def.	0·35	0·47	0·70	0·85	1·15	1·40	1·60	1·80	2·05	2·30	2·55	2·75	2·90	3·05	3·30	3·55											
2	Do.	13" 50	do. def.	0·2	0·35	0·51	0·67	0·82	0·99	1·17	1·34	1·49	1·66	1·80	1·89	1·98	2·08	2·18	2·28	2·38	2·48	2·59	2·84	2·99	3·16	3·32	3·57	3·82		Appearance compact, 956 lbs.
3	Do.	12" 50	do. def.	0·[illegible]	0·12	0·47	0·62	0·77	0·95	1·10	1·25	1·40	1·56	1·70	1·80	1·88	1·95	2·05	2·15	2·22	2·30	2·40	2·50	2·60	2·74	2·87	3·05	3·20	3·60	do. 1012.

Round Timber, price per Candy 4-8-0.

KURRAH MURDAH.

This is equal to Errool when carefully selected; some of the trees have a large portion of sap, and this goes rapidly on exposure to sun and damp, but the sound heart of the wood is almost everlasting.

Weights.

No. of experiments.	Size of Beam	Weight.	Distance between bearing.	60	116	172	228	284	340	396	452	508	564	620	676	732	788	816	844	872	900	928	956	984	998	1012	Remarks.
1	7' 0" × 2" × 2"	12" 25	6· 0" def.	0·20	0·38	0·55	0·70	0·95	1·10	1·30	1·45	1·65	1·85	2·20	2·52	2·82	3·30										Signs of compression with 732 lbs.
2	Do.	13" 50	do. def.	0·16	0·30	0·45	0·57	0·72	1·85	1·00	1·15	1·30	1·45	1·60	1·75	1·95	2·25	2·35	2·50	2·65	2·95	3·15	3·65	4·65	5·00	6·00	do. 900.
3	Do.	13" 25	do. def.	0·17	0·30	0·45	0·57	0·72	1·86	1·05	1·20	1·35	1·50	1·70	1·90	2·15	2·47	2·75	2·9	3·15	5·90						do. 900.

Round Timber, price per Candy 5 to 6 Rs.

WHITE CEDAR.

Well adapted for house-fitting, door windows in waggon building, find it warps and flies when exposed to the sun, the "white ants" destroy this wood.

Weights.

No. of experiments.	Size of Beam	Weight.	Distance between bearing	60	116	172	228	284	340	396	452	508	564	620	676	704	732	760	788	816	844	872	900	914	928	942	Remarks.
1	7'0" × 2" × 2"	8· 00	6· 0" def.	0·16	0·32	0·50	0·65	0·70	0·95	1·15	1·30	1·45	1·60	1·82	2·22	2·32	2·47	2·70	2·9	3·40	3·75	4·20	5·15	5·35	5·75	6·20	Signs of compression with 816 lbs.
2	Do.	9· 25	do. def.	0·15	0·30	0·42	0·57	0·71	0·82	0·99	1·12	1·30	1·40	1·57	1·75	1·92	2·00	2·20	2·3	2·42	2·60	2·82	3·21	3·35	3·50		do. 844.
3	Do.	8· 25	do. def.	0·28	0·48	0·68	0·87	1·18	1·33	1·38	1·75	2·10	2·43	2·78													

Round Timber, price per Candy 4-8-0 to 10 Rs.

BENTEAK.

A very useful Timber adapted for roofing stations, doors, windows and work generally.

Weights.

No. of experiments.	Size of Beam	Weight.	Distance between bearing.	60	116	172	228	284	340	396	452	508	564	592	620	648	676	704	732	760	788	816	844	Remarks.
1	7' 0" × 2" × 2"	9· 25	6· 0" def.	0·10	0·39	0·58	0·78	0·98	1·18	1·48	1·68	2·03	2·33	2·63										
2	Do.	9· 25	do. def.	0·25	0·43	0·61	0·80	1·01	1·21	1·62	1·81	1·90	2·20	2·35	2·68	2·90	3·10	3·30	3·30	4·75	4·75	5·05	5·25	Signs of compression with 816 lbs.
3	Do.	10· 25	do. def.	0·25	0·45	0·67	0·90	1·15	1·35	1·55	1·77	2·10	2·45	2·72	3·10	3·30	3·90	4·40	5·55					do.

MEMO.—Each piece on the average took 85 minutes in testing. They were cut from Timber which had been 8 months in stock, and were left 10 days after being sawn to scantling of 7·0 × 2 × 2 before testing.

Ag[illegible] Sans., Agarhu, Sans., Agaru, Tam., Eagle wood, Aquilaria agallocha, *Roxb.*
Agathis loranthifolia *Salis*, syn. of Dammara orientalis, *Rumph.*
Agati, Maleal., Tam., Agati grandiflorum, *Desv.*
Agati coccinea, *Desv.*, syn. of Agati grandiflorum, *Desv.*
Agel-hout, Dut., Eagle wood.
Aggur, Hind., Pers., Eagle wood.
Aghzakar, Pushtu, Prosopis spicigera, *Linn.*
Agila gahru, Malay, Eagle wood.
Agila wood tree, Eng., Eagle wood, Aquilaria agallocha, *Roxb.*
Agisi, Tel., Agati grandiflorum, *Desv.*
Aglaia grata, *Wall.*, syn. of Aglaia midnaporensis, *Carey.*
Aglaia midnaporensis, A. odorata, A. spectabilis, see Pegu timber trees.
Agle maram, Tam., Chickrassia tabularis, *Ad. Juss.*
Ag'r, Duk., Hind., Ag-ru, Tel., Aquilaria agallocha, *Roxb.*, Eagle wood.
Ag'ru chekka, Tel., Aquilaria agallocha.
Aguste wood, see Circar woods.
Ah nan ? ? ? Burm., Xylocarpus echinatus ???
Ahel, Heb., Ahelim, Heb., Eagle wood.
Ahi, Tahiti, Santalum album, *Linn.*, *Roxb.*
Ahilla, Singh., Cassia fistula, *Linn.*
Ahiloth, Heb., Eagle wood.
Ahir, Pers., Wrightia antidysenterica, *R. Br.*
Ahlada mara, Can., Ficus indica, *Linn.*, *Roxb.*
Ahoo-gaha, Singh., Morinda bracteata, *Roxb.*
Ain ? Burm., Dipterocarpus grandiflora, *Wall.*
Aing ? Burm., Dipterocarpus alatus, *Roxb.*
Aini mara, Maleal., Artocarpus hirsuta, *Lam.*
Ain-tha, Burm., Dipterocarpus grandiflora, *Wall.*
Aito of Tahiti, Casuarina equisitifolia.
Ajaurukh, Panjab, Acacia jacquemonti, *Bentham.*
Ak, Hind., Morinda citrifolia, *Linn.*, *Roxb.*
Ak, Hind., Calotropis procera, C. gigantea, *R. Br.*
Akakia, extract of Acacia arabica, *Willd.*
Akak kaya, Malu of Borneo, Tree, Eng.
Akar-kanta, Beng., Hind., Alangium lamarkii, *Thw.*
Akeb, Port., Arenga saccharifera, *Labill.*
Akola, Hind., Alangium lamarkii, *Thwaites.*
Akrot, Beng., Hind., Malay, Maleal., Pers ? ? Aleurites triloba, *Forst.*, *Roxb.*
Akrot, Hind., Pers., Juglans regia, *Linn.*
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Alali mara, Can., Terminalia chebula, *Retz.*
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Alangium hexapetalum, *Roxb.*, syn. of Alangium lamarkii, *Thwaites.*
Alangium tomentosum, *Lam.*, *DC.*, syn. of Alangium lamarkii, *Thwaites.*
Alareya-gass, Singh., Kurrimia ceylanica, *Arn.*
Alase gaua mara, Can., Artocarpus integrifolia, *Linn.*
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Alexandrian laurel, Eng., Calophyllum inophyllum, *Linn.*, *Roxb.*
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Allunda, Tel., Diospyros.
Almendra, *Sp.*, Amygdalus communis.
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Alpine oak, Eng., Quercus semecarpifolia.
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Amandes, Fr., Amygdalus communis, *Linn.*
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Amla kamu, Tel., Emblica officinalis, *Gærtn.*
Amlaki, Sans., Emblica officinalis, *Gærtn.*
Amli ? Ar., Guz., Hind., Tamarindus indica, *Linn.*
Amlika, Hind., Emblica officinalis, *Gærtn.*
Amlika, Sans., Tamarindus indica, *Linn.*, *Roxb.*
Amli-ka-jhar, Hind., Tamarindus indica, *Linn.*
Amliki, Hind., Emblica officinalis, *Gærtn.*
Amlok, Panjab, Diospyros lotus, *L.*
Amltas, Hind., Cassia fistula, *Linn.*
Amluj, Arab., Hind., Phyllanthus emblica, *Linn.*
Amluki, Beng., Albizzia stipulata, *Boir.*
Amoora ficiformis, *Wight Illust.*, syn. of Dysoxylon macrocarpum, *Blume.*
Ampalam, Malay, Mangifera indica, *Linn.*
Amra, Beng., Hind., Tel., Spondias mangifera, Pers., *Roxb.*, *W. & A.*
Amrai, Panjab, Ulmus erosa ? U. pumila, *Pall.*
Amrataca, Sans., Spondias mangifera, Pers.
Amrud, Hind., Amrut, Hind., Psidium guajava.

Amaltas, Duk., Cassia fistula, *Linn.*

Amusæda nelli, Singh., Emblica officinalis, *Gærtn.*

Amygdalæ dulces, Lat., sweet Almonds.

Amyris agallocha, *Roxb.*, syn. of Balsamodendron agallocha, *W. & A.*

Amyris agallocha, *Roxb.*, *W. & A.*, syn, of Commiphora madagascarensis, *Lindl.*, *Fl. Med.*

Amyris commiphora, *Roxb.*, syn, of Balsamodendron agallocha, *W. & A.*

Amyris commiphora, *Roxb.*, syn. of Commiphora madagascarensis, *Lindl.*, *Fl. Med.*

Amyris zeylanica, *Retz.*, syn. of Canarium commune, *Linn.*

Anaan-tha, Burm., Fagræa fragrans.

Anacardium latifolium, *Lam.*, syn. of Semecarpus anacardium, *Linn.*, *Roxb.*, *W. & A.*, *W. Ic.*

Anacardium officinarum, *Gært.*, syn. of Semecarpus anacardium, *Linn.*, *Roxb.*, *W. & A.*

Anachandra, Tel., Acacia ferruginea, *DC.*

Anambo, Burm., Henslowia paniculata, *Miqu.*

Anan, Burm., Cyrtophyllum fragrans.

Anan pho, Burm., Gordonia, *Species.*

Anao, Malay, Arenga saccharifera, *Labill.*

Anar, Hind., Punica granatum, *Linn.*

Ana-runga, Maleal., Casearia ovata, *Roxb.*

Anasandra, Tel., Acacia ferruginea, *DC.*, *W & A.*

Anashtar, Hind., Erythrina stricta, *Roxb.*

Ana runga, Maleal., Casearia canziala, *Wall.*

An char, Malay, Upas antiar, Antiaris toxicaria, *Leschenault.*

Andal of Chenab, Pinus excelsa, *Wall.*

Andaman red wood tree, Eng., Pterocarpus dalbergioides, *Roxb.*

Andara gass, Singh., Dichrostachys cinerea, *W. & A.*

Andersonia altissima, *Roxb.*, syn. of Conocarpus latifolia, *Roxb.*, *W. & Ic.*, *A. W.*

Andersonia acuminata, *Roxb.*, syn. of Conocarpus acuminatus, *Roxb.*, *Royle.*

Andersonia lanceolata, *Rottler*, syn. of Conocarpus acuminatus, *Roxb.*, *Royle.*

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Ani mulla, Tam ? ? ? Acacia tomentosa, *Willd.*

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Anjili maram, Tam., Artocarpus hirsuta, *Lam.*

Anjiri, Panjab, Ficus caricoides.

Anjuna, Mahr., Memecylon tinctorium, *Kon.*, *W. & A.*

Ankœnda, Singh., Cyminosma pedunculata, *DC.*

Ankola, Sans., Ankolamu, Sans., Tel., Alangium lamarkii, *Thwaites.*

Ankul, Ankulo, Mahr., Alangium lamarkii, *Thw.*

Annah-beng, Burm., of Martaban, Fagræa fragrans, *Roxb.*

Annan, Burm., of Amherst, Tavoy and Mergui, Fagræa fragrans, *Roxb.*

Annan-tha, Burm. ? of Amherst, Tavoy and Mergui, Fagræa fragrans, *Roxb.*

Anni carra, Tam., Odina wodier, *Roxb.*

Anogeissus acuminatus, *Wal.*, syn. of Conocarpus acuminatus, *Roxb.*, *Royle.*

Anogeissus latifolius, *Wall.*, syn. of Conocarpus, latifolia, *Roxb.*, *W. & Ic.*, *A. W.*

Anola, Hind., Beng., Emblica officinalis, *Gærtn.*

Anowe, Malay, Arenga saccharifera, Labill.

Ansjeni, Maleal, Artocarpus hirsuta, *Lam.*

Antiaris saccidora, *Lesch.*, syn. of Antiaris innoxia, *Blume.*

Antiaris toxicaria, *Lesch.*, syn. of Upas antiar.

Antidesma alexiterium, *Spreng.*, syn. of Antidesmus bunias, *Spreng.*

Antidesma pubescens, *Roxb.*, syn. of Antidesma paniculatum, *Roxb.*

Aonla, Beng., Hind., Duk., Phyllanthus emblica, *Linn.*

Aonli, Mahr., Phyllanthus emblica, *Linn.*

Ape-faced flower tree, Eng., Mimusops elengi, *L.*

Apta, Mahr., Bauhinia racemosa, *Lam.*

Apricot, Eng., Armeniaca vulgaris.

Apurs of Panjab, Juniperus excelsa, *Bieb.*

Appel, Maleal., Premna integrifolia, *Roxb.*

Apple-shaped guava, Psidium pomiferum, *Linn.*

Aqulugin, Ar., Aquilaria agallocha, *Roxb.*

Aquilaria ovata, syn. of Aquilaria Malaccensis, *Lam.*

Ar., Panjab, Acacia jacquemontii, *Bentham.*

Aralu, Sans., Ailantus excelsus, *Roxb.*

Aralu-gass, Singh., Terminalia chebula, *Retz.*

Aramanda, Tel., Eugenia bracteata, *Roxb.*

Arang-bara, Malay, Charcoal.

Araucaria excelsa, H. K., syn. of Altingia excelsa.

Arawi-nim, Tel., Sclerostylis atalantoides, *Blume*

Araya-angely, Maleal., Antiaris innoxia, *Blume.*

Arbor naghas, Burm., syn. of Mesua ferrea, *L.*

Arbor ovigera, *Rumph*, syn. of Hernandia ovigera, *Linn.*

Ardanda, Duk., Hind., Capparis horrida, *Linn*

Ardawal of Hazara and Murree, Rhododendron arboreum, *Lam.*, *W. Ic.*

Are, Tel., Bauhinia racemosa, *Lam.*

Areca horrida, *Thwaites*, *Hooker*, syn, of Caryota horrida, *Gardn.*, *Moon's Cat.*

Areca faufel, *Gærtn*, syn. Areca catechu, *Linn*

Areca palm, Eng., Areca catechu, *Linn.*

Areeta, Mahr., Sapindus emarginatus, *Vahl.*, *Roxb.*, *W. & A.*, *Ill. Graham.*

Aren, Jav., Arenga saccharifera *Labill.*

Arghawan, Pushtu, Bauhinia variegata, *L. var.*

Aria bepou, Mal., Azadirachta indica, *A. Juss.*

Aridde, Singh., Campnospermum zeylanicum, *Th.*

Arimedamu, Tel., Vachella farnesiana, *W. & A.*

Arind, or Harind, Panjab, Ricinus communis, *L.*

Aris, Hind., Adhatoda vasica, *Nees.*

Arishta, Sans., Sapindus emarginatus, *Vahl.*,

Arivita, Tel., Eugenia bracteata, *Roxb.*, *W. & A.*

Ariya poriyam, Mal., Antidesma bunias, *Spreng.*

Arjuno, Beng., Lagerstrœmia reginæ, *Roxb.*

Arjun, Beng., Hind., Mahr., Terminalia arjuna, *W. & A.*

Arjuna ? ? Sans., Terminalia elata, *Ainslie*, *W. Ic.*

Arka, Sans., Calotropis gigantea, *R. Br.*

Arkhar of the Beas, Jhullundhur and Ravi, Rhus acuminata, *DC.*, and R. buckiamela, *Roxb.*

Arkhol of the Chenab and Kaghan, Rhus acuminata, *DC.*

Arkol, and kokkari of Chenab, Rhus buckiamela, *Roxb.*

Arramana, Singh., Cassia timoriensis, *DC.*

Ar[illegible]utte, Tam., Terminalia coriacea, T. tomentosa, *W. & A.*
Arroo tree, Archipelago, Casuarina equisitifolia.
Artocarpus champadah of Botanists, Artocarpus polypheme.
Artocarpus heterophylla, *Lam*, syn. of Artocarpus integrifolia, *Linn.*
Artocarpus pubescens, *Moon's Cat*, syn. of Artocarpus nobilis, *Thw.*
Artocarpus pubescens, *Willd*, syn. of Artocarpus hirsuta, *Linn.*
Artocarpus sylvestris, Ranfannas, Mahr.
Aru, Panj., Aymgdalus persica.
Aruchi, deus, of Bassahir, Deutzia staminea.
Arudonda, Tel., Capparis horrida, *Linn.*, *W.* & A.
Aruli, Hind., Emblica officinalis, *Gærtn.*
Arund of Jhelum, Prinsepia utilis, *Royle.*
Arundo bambos, *Linn.*, syn. of Bambusa arundinacea, *Willde*, *Roxb.*
Aruneya, Mahr., Arunuyum, Maleal., Sans.
Arunyavu, Can., Timber.
Arur or ayar, Panjab. Andromeda ovalifolia, *Don.*
Arus, Hind, Adhatoda vasica, *Nees.*
Arushkara, Sans., Semecarpus anacardium, *Linn.*
Arwa ?
Asam, Malay, Tamarindus indica, *Linn.*, *Roxb.*
Asan, Duk., Hind., Panj., Terminalia tomentosa, *W. & A.*, T. elata, *Ainslie*, *W. Ic.*
Asan, also Asauna, Can., Duk., Mahr., Briedelia montana, B. spinosa, *Willde*, *Roxb.*
Asclepias gigantea, *Willde*, syn. Calotropis gigantea, *R. Br.*
Asclepias herbacea of Roxburgh, syn. of Calotropis herbacea, *Carey.*
Asclepias procera, *Ait.*, syn. of Calotropis procera, *R. Br.*
Asganda, Hind., Adhatoda vasica, *Nees.*
Ash, Eng., Fraxinus, *Species.*
Ash-leaved tree, Azadirachta indica, *A.*, *Juss.*
Ashan, Beng., Terminalia tomentosa, *W. & A.*
Ashur, Arab., Calotropis gigantea, *R. Br.*
Asiatic Redwood, Eng., Colubrina asiatica, *R. Br.*
Asoka chettu, Tel., Guatteria longifolia, *Wall.*
Asok maram, Tam., Guatteria longifolia, *Wall.*
Aspidium arboreum, *Moon*, syn. of Cyathea arborea.
Astar of Central Provinces, Bauhinia racemosa, *Lam.*
Atakætiya, Singh., Griffithia gardneri, *Thwaites.*
Atanday, Tam., Capparis horrida, *Linn.*
Atcha maram Tam., Bauhinia racemosa, *Lam.*, Ebony.
Atcha manu, Tel., Ebony.
At-demmata, Singh., Gmelina arborea, *Roxb.*
Ati muktamu, Tel., Dalbergia oojeinensis, *Roxb.*
Ati of Tahiti, Calophyllum inophyllum, *Linn.*
Atteekka-gass, Singh., Ficus glomerata, *Roxb.*
Atti chettu, Tel., Atti maram, Tam., Ficus glomerata, *Roxb.*
Atti maram, Tam., Hardwickia binata, *Roxb.*, ii, *W. & A.*
Attukedasa, Maleal, Æschynomene aspera, *L.*
Attunette, Tam., Æschynomene aspera, *Linn.*
Atundai, Tam., Capparis horrida.
Augasta, Beng., Agati grandiflorum, *Desv.*
Auneng karra, Tel., Alangium hexapetalum.
Aungra, Hind., Emblica officinalis, *Gærtn.*
Awul kandur, Hind., Boswellia thurifera, *Roxb.*
Ausandra, Tel., Acacia ferruginea, *DC.*
Australian or Moreton bay pine, Araucaria Cunninghamii, *G. Don.*
Avarai maram, Tam., Cassia auriculata.
Avarai-pattai, Tam., Cassia auriculata bark.
Ave-mavo, Tam., Careya arborea, *Roxb.*
Avisi, Tel., Agati grandiflorum, *Desv.*
Avicennia Africana, *Palisot*, syn. Avicennia tomentosa, *Linn.*, *Roxb.*, *W. Ic.*
Avicennia oepata, *Buch.*, *Herb.*, syn. of Avicennia tomentosa, *Linn.*, *Roxb.*, *W. Ic.*
Avicennia resinifera, *Forst.*, syn. of Avicennia tomentosa, *Linn.*, *Roxb.*, *W. Ic.*
Aya maram, Tam., Ulmus integrifolia, *Roxb.*
Ayasru, Amboin, Santalum album, *Linn.*, *Roxb.*
Ayatta, Panjab, Andromeda ovalifolia, *Don.*
Ayugma chadda, Sans., Alstonia scholaris, *R. Br.*
Ayugma parma, Sans., Alstonia scholaris, *R. Br.*
Ayni, Can., of N. Can., Terminalia coriacea, *W. & A.*, T. tomentosa, *W. & A.*
Azun, Mahr., Terminalia arjuna, *W. & A.*

B

Baalut, Arab., Oak, Eng.
Babee dimeree, Uria, see Purla Kimedy forests.
Babul, Hind., Acacia arabica, *Willd.*, *W. & A.*
Babbul, Duk., Acacia arabica, *Willd.*, *W. & A.*
Babula, Hind., Acacia arabica, *Willd.*, *W. & A.*
Babul of Panjab, Acacia farnesiana, *Willd.*
Babul ka gond, Hind., Gum of Acacia arabica.
Babdat, Hind., Nauclea ?? *Species.*
Bada, Panj., Salix babylonica, *Linn.*, *Dr. Stewart.*
Badadumu ? Tam. Erythrina sublobata, *Roxb.*
Badam, Beng., Duk., Terminalia catappa, *Linn.*
Badam, Duk., Guz., Hind., Malay, Pers., Amygdalus communis, *Linn.*
Baduma chettu, Tel., Terminalia catappa, *Linn.*
Badami, Hind., Terminalia catappa, *Linn.*, *Roxb.*
Badam-i-farsi, Pers., Amygdalus communis, *Linn.*
Badam-i-hindi, Duk., Terminalia catappa, *Linn.*
Badamsi, Burm., Amygdalus communis, *Linn.*
Badapu chettu, Tel., Erythrina indica, *Lam.*
Badarin, Panjab, Ficusglomerata, *Roxb.*, *Willde*
Baddha of Pangi, Salix, *Species.*
Badedam ? Tel., Erythrina sublobata, *Roxb.*
Badida chettu, Tel., Erythrina indica, *Lam.*
Badidapu chettu, Tel., Erythrina indica, *Lam.*
Badracha, Tel., Elæocarpus tubercalatus, *Roxb.*
Badrachai, Tam., Elæocarpus tubercalatus, *Roxb.*
Baee dhimeree, Uria ? Ficus, *Species.*
Bagh-ankra, Beng., Alangium lamarkii, *Thw.*
Baghuna of Dera Ismail Khan, Rhus cotinus.
Bagnu of Kaghan, Populus ciliata, *Wall.*
Bagu, Malay, Gnemium gnetum, *Linn.*
Bahadha, Tel., Terminalia belerica, *Roxb.*
Bahan, Pushtu, Populus euphratica, *Oliv.*
Bahira, Sans., Terminalia belerica, *Roxb.*
Bahul, Hind., Grewia oppositifolia, *Buch.*
Baibga, Burm., see Akyab.
Bairiye, Singh., see Ceylon woods.
Bairangi, of Khandesh, Bignonia xylocarpa, *Roxb.*
Baishi, Hindi., Salix tetrasperma, *Roxb.*
Bakam, Arab., Beng., Guz., Hind., Cæsalpinia sappan, *Linn.*, *Roxb.*, *W. & A.*
Bakam, Pers ? ? ? Pterocarpus santalinus, *Linn.*

Bakamu chakka, Tel., Cæsalpinia sappan, *Linn.*
Bakar, Panjabi, Cornus oblonga, *Wall.*
Bakli, Panjabi, Lagerstrœmia parviflora, *Roxb.*
Bakmee-gass, Singh., Nauclea coadunata, *Roxb.*
Bakul, Duk., Mahr., Bakula, Beng., Hind., Sans., Mimusops elengi, *Linn.*, *Roxb.*
Bakus, Beng., Adhatoda vasica, *Nees.*
Balai, Can., Diospyros melanoxylon, *Roxb.*
Balampuli, Maleal., Tamarindus indica, *Linn.*
Balanites Ægyptiaca, *var. Indica*, *W. Ill.*, syn, of Balanites Ægyptiaca, *Delile.*

Balanopteris minor, *Gœrtn.*, syn. of Heritiera minor, *Lam.*, *DC.*, *Roxb.*
Balanopteris tothila, *Gœrtn.*, syn. of Heritiera littoralis *Ait.*, *DC.*, *Roxb.*
Balawa, Burm., Garania speciosa ?
Ballidi chettu, Tel., see Purla Kimedy forests.
B[illegible], see Penang woods.
Baloh bungah, see Penang woods.
Balliah, Uria, see Purla Kimedy forests.
Balsamaria inophyllum, *Lour.*, syn. of Calophyllum inophyllum, *Linn.*, *Roxb.*
Balsamodendron agallocha, *W. & A.*, syn. of Commiphora Madagascarensis, *Lindl.*, *Fl.*, *Med.*
Balsamodendron Roxburghii, *Arn. Wight Ill.*, syn. of Balsamodendron, agallocha, *W. & A.*
Balsamodendron, Roxburghii, *Arn.*, *W. Ill.*, syn. of Commiphora Madagascarensis, *Lindl.*
Balsamodendron zeylanicum, *Kunth*, syn, of Canarium commune, *Linn.*, *D.C.*, *W. & A.*, *Koen.*

Balsam poplar, Eng., Populus balsamifera, *Linn.*
Balusu kura, Canthium parviflorum, *Lam.*, *Roxb.*
Balut of Lahoul, Quercus ilex, *Linn.*
Bam, Ar., Melia sempervirens, *Roxb.*
Bamaw, Burm., see Burmah, Akyab.
Bamba, Hind., Bambusa.
Bomboo, Eng., Bambusa.
Bambos arundinacea, syn, of Bambusa arundinacea, *Willde.*, *Roxb.*
Bambou, Fr., bambusa.
Bambouai Burm., Careya arborea, *Roxb.*
Bambu, It., Malay, bambusa.
Ban, Ar., Melia sempervireus, *Roxb.*, *Flor. Ind.*
Ban, Panj., Himalaya, Eng., Quercus ilex, *Linn.*, Quercus semecarpifolia, Quercus incana.
Ban of Kaghan, Rhus cotinus.
Ban-akhrot, Hind., Pavia indica, *Royle*, *Him. Bot.*
Banaush, Panjab., Fraxinus floribundus, *Wall.*
Ban-bambhooai, Beng., Careya arborea, *Roxb.*
Ban-chir, Panj., Syringa emodi, *Wall.*
Banchor, Panjabi, Euonymus fimbriata, *Wall.*
Banchur of Hazara, Quercus semecarpifolia.
Banda, Bali, Areca catechu, *Linn.*
Ban dakhur, Panj., Syringa emodi, *Wall.*
Bandara, Tel., Hymenodyction excelsum, *Wall.*
Bandaru, putkanda, daru, bakshi of Kangra, Gardenia tetrasperma.
Bandi Guruvindza, Tel., Adenanthera pavonina, *Linn.*
Bandita chettu, Tel., Erythrina indica, *Lam.*
Bang, N. W. Him., Abies smithiana, *Wall.*
Ban-gab, Beng., Diospyros cordifolia, *Roxb.*
Banj, Banji, Panj., Quercus incana, Q. dilatata, *Lindl.*
Bankahu of Hazara, Vitex negundo, *Linn.*, *Roxb.*
Banka nakkera, Tel., Cordia myxa, *Linn.*, *Roxb.*
Bankau, Panj., Olea Europæa, *L.*
Ban-kha, Burm., see Amherst province.
Ban khajur, Beng., Caryota urens, *Linn.*
Ban-khor of Jhullundhur, Pavia indica, *Royle.*

Ban kukur, Panjabi, Cornus oblonga, *Wall.*
Ban luddar of Murree, Abies smithiana, *Wall.*
Banmehal of Pulu, Pyrus baccata.
Banna, plains of Panjab, Vitex negundo, *Linn.*
Bannapoo wood, see Canara.
Banni, Panj., Quercus dilatata, *Lindl.*
Ban-nuchi, Maleal., Vitex negundo, *Linn.*
Ban-phunt, Panj., Syringa emodi, *Wall.*
Ban-raj, Beng., Bauhinia racemosa, *Lam.*
Bans, Hind., Bambusa.
Ban sanjli, Panj., Cratægus oxyacantha, *Linn.*
Bansh, Beng., Bambusa.
Banur lati-gach'h Beng., Cassia fistula, *Linn.*
Banyan tree, Eng., Ficus indica, *Linn.*, *Roxb.*
Baobab tree, Eng., Adansonia digitata, *Linn.*
Bar, Beng., Ficus indica, *Linn.*, *Roxb.*
Bara flawan, Hind., Caryota urens, *Linn.*
Borain, Panj., Quercus dilatata, *Lindl.*
Baranki chettu, Tel., Butea superba, *Roxb. W. & A.*
Barauns, Panjabi, Rhododendron arboreum, *Sm.*, *W. Ic.*
Barbadoes cedar, see Cedar.
Barbadoes flower fence, Parkinsonia aculeata, *Linn.*
Barburamu, Tel., Acacia arabica *Willd*, *W. & A.*
Barcha of Murree hills, Quercus floribunda.
Barchan, Panj., Quercus dilatata, *Lindl.*
Barchanapa, Tel., see Erythrina indica.
Bargat or Bor of Panjab, Ficus indica, *Linn.*, *Roxb.*

Barijamu, Tel., Erythrina indica, *Lam.*, *Roxb.*
Barinika, Uria, Tel., Trophis aspera, *Retz.*
Bari venka, Uria, Tel., Trophis aspera, *Retz.*
Barjapu chettu, Tel., Erythrina indica, *Lam.*
Bar-jat, Hind., Nyctanthes arbor-tristis, *Linn.*
Bar ka jhar, Hind., Ficus indica, *Linn.*, *Roxb.*
Baro, Panjabi, Albizzia elata.
Baro kala goru, Hind., Tel., Spathodea roxburghii, *Spreng.*
Barokolee Uria, see Purla Kimedy forests.
Baroon, Beng., Cratæva roxburghii, *R. Br.*
Barphali of Kaghan, Euonymus fimbriata, *Wall.*
Barr of Murree hills, Quercus dilatata, *Lindl.*
Barra-al, Hind., Morinda citrifolia, *Linn.*, *Roxb.*
Barral, Hind., Artocarpus integrifolia, *Linn.*
Barra lesura, Hind., Cordia latifolia, *Roxb.*
Barranki, Uria, Tel., Trophis aspera, *Retz.*
Barranki chettu, Tel., see Ficus asperrima, *Roxb.*
Barsanga, Maleal., Bergera konigii, *Linn.*
Bartam, Malay, Eugeissonia tristis, *Griff.*
Bartho of N. W. Hills, Erythrina stricta, *Roxb.*
Barthoa of Hushyarpur, Hymenodyction excelsum, *Wall.* in *Fl. Ind.*, *W. & A.*, *W. Ic.*

Bartondie, Mahr., Morinda citrifolia, *Linn.*, *Roxb.*
Baru, Barum, sap. of Arenga saccharifera, *Labill.*
Barungi of Hazara, Quercus dilatata, *Lindl.*
Barungi of Murree hills, Quercus ilex, *Linn.*
Baryxylum rufum, Iron wood.
Barzha of Kanawur, Armeniaca vulgaris.
Basilicon, Greek, Juglans regia, *Linn.*
Basoh, Milanau of Borneo Tree, Eng.
Basoka, Beng., Adhatoda vasica, *Nees.*
Basoti of Kangra, Colebrookia oppositifolia.
Bassar, Panjab, Capparis spinosa.
Bassia neriifolia, Moor, Dasyaulus neriifolia, *Th.*
Bastard cedar, Eng., Cedrela toona, *Roxb.*, Chickrassia tabularis, *Ad. Juss.*, Guazuma tomentosa, *H. B. Kunth.*, *W. & A.*, *W. Ill.*
Bastard ebony, see Bastard woods, Ebony.
Bastard mahogany, Eng., Cedrela toona, *Roxb.*
Bastard poon, Eng., Sterculia fœtida, *Linn.*, *Roxb.*

Bastard sago palm, Caryota urens, *Linn.*

Bastard teak, Butea frondosa, *Roxb.*, also Erythrina indica, *Lam.*, *Roxb.*

Bastard woods, Soymida febrifuga, Cedar, Chickrassia tabularis.

Bat, BENG., Ficus indica, *Linn.*, *Roxb.*

Bata-lee SINGH., Bambusa stridula.

Batangi, Batank of Jhelum, Murree hills and Hazara, Pyrus variolosa, *Wall.*

Bat-bar, PANJAB, Ficus glomerata, *Roxb.*, *Willde*,

Bather, PANJAB, Grewia rothii, *DC.*

Batkan, PANJ., Celtis nepalensis, *Planch.*

Batkar, Murree hills, Celtis caucasica, *Willde.*

Batta-kerilla-gass, SINGH, Sethia acuminata, *Arn.*

Battal, PANJAB, Euonymus fimbriata, *Wall.*

Battal of Kaghan, Pyrus aucuparia.

Batte dombe, SINGH., Eugenia caryophyllifolia, *Roxb.*, *W. Ic.*

Battee sal, BENG., Dipterocarpus alatus, *Roxb.*

Baubwai, BURM., Careya arborea, *Roxb.*, *Corr.*

Bauhinia acuminata, syn. of Bauhinia nitida.

Bauhinia candida, *Ait.*, syn. of B. acuminata, *Linn.*, *Roxb.*, also of B. albida, and B. candida, *var.* variegata, *Linn.*, *W. & A.*, *Roxb.*

Bauhinia coromandeliana, *DC.*, syn. of Bauhinia purpurea, *Linn.*

Bauhinia epicta, *Kon.*, syn. of B. racemosa, *Lam.*

Bauhinia lingua, *DeCand.*, syn. of B. scandens, *Linn.*

Bauhinia parviflora, *Vahl.*, *DC.*, *Roxb.*, syn. of Bauhinia racemosa, *Lam.*

Bauhinia piperifolia, *Roxb.*, syn. of B. anguina, *Roxb.*

Bauhinia purpurascens, syn. of B. variegata, *Linn.*

Bauhinia racemosa, *Vahl.*, syn. of B. vahlii, *W. & A.*

Bauhinia scandens, *Roxb.* in E. I. C. Mus., syn. of Bauhinia vahlii, *W. & A.*

Bauhinia variegata, *Linn.*, syn. of B. purpurascens.

Bavena, CAN., Melia azedarach, *Linn.*

Bawa, MAHR., Cassia fistula, *Linn.*

Baya, MAHR., Cassia fistula, *Linn.*

Baygona, URIA, see Purla Kimedy forests.

Bayla nava maram, TAM., Dinduga tree, ANGLO-CAN.

Bayvena, CAN., Melia azedarach, *Linn.*

Bdellium, ENG., Cammiphora Madagascarensis, *Lindl. Fl. Med.*

Bead tree, ENG., Azadirachta indica, *Ad. Juss.*, Melia azedarach, *Linn.*

Bed, PERS., Calamus rotang, *Linn.*, Canes.

Bed-i-anjir, PERS., Ricinus communis, *Linn.*

Bed-i-leila, PANJ., Salix tetrasperma, *Roxb.*

Bed-i-majnoon, HIND., Salix babylonica, *Linn.*

Bed-i-mushk, PERS., Salix caprea, *Linn.*

Beebla, MAHR., Pterocarpus dalbergioides, *Roxb* Pterocarpus marsupium, *Roxb.*

Beebwa, MAHR., Semecarpus anacardium, *Linn.*

Beef wood, ENG., Casuarina equisitifolia and Casuarina muricata, *Roxb.*

Beejee kooroowan, URIA, Wrightia, *Species.*

Beheyra, HIND., Terminalia belerica, *Roxb.*

Behra, HIND., Nauclea ? ? *Species.*

Behul, HIND., Grewia oppositifolia, *Buch.*

Beidelsar, HIND., Calotropis procera, *R. Br.*

Bejasal, HIND., and Bejasar, Hind. of Nagpore, Pterocarpus marsupium, *Roxb.*

Bekli, behkul, bhehkar, and bhekling of Kunawar, Ravi, Beas, Sutlej, Prinsepia utilis, *Royle.*

Bel, BENG., HIND., MAHR., Ægle marmelos, *Corr.*

Beladur, AR., Semecarpus anacardium, *Linn.*

Belee vaulkee, CAN., Terminalia arjuna, *W. & A.*

Beleyleh, AR., PERS., Terminalia belerica, *Roxb.* and Terminalia rubrica ?

Beleluj, AR., Terminalia belerica, *Roxb.*

Belgaum walnut, ENG., Aleurites triloba, *Forst.*

Beli, SINGH., Ægle marmelos, *Corr.*

Bel kambi, CAN., Albizzia amara, *Boivin*, *Benth.*

Bellawa, GUZ., Semecarpus anacardium, *Linn.*

Belleric myrobalan, ENG., Terminalia belerica, *Roxb.*

Belli nundi, MAHR., Lagerstrœmia parviflora, *Roxb. Fl. Ind.*, *W. Ic.*

Belli-pata, SINGH., Paritium tiliaceum, *Ad. Juss.*

Belutta-champagam, MALEAL., Mesua ferrea, *Linn.*, *DC.*

Belygobel, SINGH., Hibiscus tiliæfolia.

Bendi, MAHR., Thespesia populnea, *Lam.*, *W. Ic.*

Bengal almond tree, Terminalia catappa, *Linn.*

Bengal fig tree, ENG., Ficus indica, *Linn.*, *Roxb.*

Bengal quince, ENG., Ægle marmelos, *Corr.*

Bengali badam, MAHR., Terminalia catappa, L.

Benjamin, ENG., Styrax benzoin, *Dryander.*

Ben-teak, ANGLO-CAN., Lagerstrœmia macrocarpa, *Roxb.*, *W. Ic.*

Benzoin, ENG., Styrax benzoin, *Dryander.*

Berberis acanthifolia *Wall.*, syn. of Berberis Nepalensis, *Spr.*

Berberis affinis, *Don.*, syn. of Berberis floribunda.

Berberis angustifolia, *Roxb.*, syn. of Berberis aristata, *DC.*

Berberis aristata, *Wall.*, and B. ceratophylla, *Don.*, syn. of B. floribunda.

Berberis chitra, *Ham.*, syn. of Berberis aristata,

Berberis coriaria, *Royle*, syn. of B. floribunda.

Berberis leschenaultii, *Wall.*, syn. of Berberis Nepalensis, *Spr.*

Berberis miccia, *Ham.*, syn. of B. nepalensis, *Spr.*

Berberis petiolaris, *Wall.*, syn. of B. floribunda.

Berberis pinnata, *Roxb.*, syn. of B. nepalensis, *Spr.*

Berberis tinctoria. *Lesch.*, syn. of B. aristata, *DC.*

Berberis umbellata, *Lindl.*, syn. of B. floribunda.

Ber; birota of Salt Range, Sutlej and Ravi, Zizyphus nummularia, *W. & A.* and Z. jujuba.

Berchemia oppositifolia, *Wall.*, syn. of Sageretia oppositifolia, *Brogn.*

Berda, MAHR., Terminalia belerica, *Roxb.*

Berfa, PANJ., Populus balsamifera, *Linn.*

Bergera nitida, *Thw.* syn. of Clausena indica, *Oliv.*

Beriya, SINGH., Lumnitzera racemosa, *Willde.*

Ber ka jhar, DUK., Zizyphus jujuba, *Willde.*

Berli, MAH., Caryota urens, *Linn.*

Berra, PUSHTU, Zizyphus jujuba, *Willde*, *Lam.*

Bes, Bais of Hazara, Salix, *Species.*

Bet, Beta, BENG., HIND., Canes, Calamus rotang, *Linn.*

Betada swamamki vriksha, CAN., Inga xylocarpa,

Beta goonda, CAN., Uvaria, *Species.*

Betamu, Bettamulu, TEL., Canes, Calamus rotang, *Linn.*

Betel-nut Palm, ENG., Areca catechu, *Linn.*

Bethal, pethal of Chenab, &c., Juniperus squamosa.

Bettapu chettu, TEL., Calamus rotang, *Linn.*, *Roxb.*

Beula, DUK., Pterocarpus marsupium, *Roxb.*

Beurreria lævis, *G. Don.*, Ehretia lævis, *Roxb.*

Bhada, HIND., Nauclea ? ? *Species.*

Bhalataka, SANS., Semecarpus anacardium, *Linn.*

Bhallatamu, TEL., Semecarpus anacardium, *Linn.*

Bhallatiki, TEL., Semecarpus anacardium, *Linn.*

Bhalawan, Hind., Semecarpus anacardium, *Linn.*
Bhalleab, Uria, Semecarpus anacardium, *Linn.*
Bharjapatri chettu, Tel., Betula bhojpatra, *Wall.*
Bhatoo, Hind., Sponia, *Species.*
Bhayroo, Uria, Chloroxylon swietenia, *Roxb.*
Bhel, Panjab, Andromeda ovalifolia, *Don.*
Bhela, Beng., Duk., Hind., Semecarpus anacardium, *Linn., Roxb., W. & A., W. Ic.*
Bhelataki, Beng., Semecarpus anacardium *Linn.*
Bher, Beng., Hind., Mahr., Zizyphus jujuba,
Bhera, Mahr., Dereah.
Bherli-mahar, Tam., Caryota urens, *Linn.*
Bheulah, Mahr., Pterocarpus marsupium, *Roxb.*
Bhiru, Hind., Chloroxylon swietenia, *Roxb.*
Bhita padari, Sans., Stereospermum suaveolens, *W. Ic.*
Bhogara, Mahr., Casearia elliptica.
Bhokur, Hind., Cordia latifolia, *Roxb.*
Bholataki, Beng., Semecarpus anacardium, *Linn.*
Bholsari, Duk., Mimusops elengi, *Linn., Roxb.*
Bhora, Beng., Rhizophora mucronata, *Lam.*
Bhumowra, Hind.. Cornus, *Sp.*
Bhuntas, Panjab, Salix tetrasperma, *Roxb.*
Bhurjamu, Sans., Tel., Betula bhojpatra, *Wall.*
Bhyni, Can., Caryota urens, *Linn.*
Bia, Duk., Pterocarpus marsupium, *Roxb.*
Biar of Hazara, & Mehra forest, Pinus excelsa, *Wall.*, Pinus longifolia, *Lamb.*
Bibla, Hind., Pterocarpus marsupium, *Roxb.*
Biboa, Biboowa, Bibwa, Mahr., Semecarpus anacardium, *Linn.*,Semecarpus cuneifolius,*Rxb.*
Bida, Panj., Salix tetrasperma, *Roxb.*
Bidai, Panj., Salix babylonica, *Linn.*
Bidal, Beng., Bauhinia purpurascens.
Bignonia chelonoides, *Linn., Roxb.*, syn. of Stereospermum chelonoides, *W. Ic., DC.*
Bignonia falcata, *Kœn's* MSS., syn. of Spathodea rheedii, *Spreng.*
Bignonia indica, *Linn.*, syn. of Calosanthes indica, *Blainv.*
Bignonia pentandra, *Lour.*, syn. of Calosanthes indica, *Blainv.*
Bignonia quadrilocularis, *Roxb.*, Spathodea Roxburghii, *Spreng.*
Bignonia spathacea, *Linn. fl. suppl.*, syn. of Spathodea rheedii, *Spreng.*
Bignonia stipulata, *Roxb. Fl.*, syn. of Spathodea stipulata, *Wall.*
Bignonia suaveolens, *Roxb.*, syn. of Stereospermum suaveolens, *W. Ic.*
Bignonia suberosa, *Roxb.*, syn. of Millingtonia hortensis, *Linn.*
Bignonia undulata, *Roxb.*, syn. of Tecoma undulata, *G. Don.*
Bikki, Tel., Gardenia enneandra, *Kon., W. & A.*, also.
Bikki, Tel., Gardenia latifolia, *Ait.*
Bil of Panjab. Ægle marmelos, *Corr.*
Bilate amra, Beng., Spondias dulcis, *Forst.*
Bilimbi, Beng., Eng., Averrhoa bilimbi, *Willde.*
Bilin of Panjab, Feronia elephantum, *Corr.*
Billi nandi, Can., Lagerstrœmia macrocarpa, *Roxb.*
Billu chettu, Tel., Chloroxylon swietenia, *Roxb.*
Billudu, Tel., Chloroxylon swietenia, *Roxb.*
Bilugu, Uria, Chloroxylon swietenia, *Roxb.*
Bilvamu chettu, Tel., Ægle marmelos, *Corr.*
Bilvar titha mara, Can., Feronia elephantum,
Bin, Burm., Tree, Eng.
Bina, Beng., Avicennia tomentosa, *Linn., Roxb.*
Bincha, Duk., Flacourtia sapida, *Roxb.*
Bindake, Hind., Sapindus emarginatus, *Vahl.*
Bingah ? Burm., Nauclea diversifolia, *Wall.*
Bira, Tel., Elæodendron Roxburghii, *W. & A.*
Birar of Beas, Zizyphus nummularia, *W. & A.*
Bird cherry, Eng., Prunus padus, *Linn.*, Cerasus puddum.
Birmi, Hind., Cratæva nurvala, *Buch., Ham.*
Birmi-ki-jhar, Duk., Cratæva Roxburghii, *R.*
Bis, Panjab, Salix tetrasperma, *Roxb.*
Bis of Kaghan, Myricaria, *Sp.*
Bisa, Panj., Salix babylonica, *Linn.*
Bisindidi of Chenab, Gardenia tetrasperma.
Bisra, Panj., Cedrela toona var serrata, *Royle.*
Bissahri pala, Panjab, Diospyros lotus, *L.*
Biti, Can., Blackwood.
Biti maram, Tam., Dalbergia sissoides, *Grah.*
Bitsu, Panj., Salix babylonica, *Linn.*
Bitti, Can., Dalbergia latifolia, *Roxb., W. & A.*
Biul, Hind., Grewia oppositifolia, *Buch.*
Biuns changma, Panj., Populus nigra, *L.*
Bjoo-ben, Burm., Dillenia pentagyna, *Roxb., W. & A.*
Black agallocha, Eng., Aquilaria agallocha, *Roxb.* Eagle wood.
Black bully, Eng., Achras sapota, *Linn.*
Black dammer Tree, Eng., Canarium strictum.
Blackwellia tetrandra, *W. Ic. A.*, syn. of Blackwellia ceylanica. *Gardner.*
Blackwood, Eng., Dalbergia, *Species.*
Blackwood tree, Eng., Dalbergia latifolia, *Roxb.*
Blatti, Maleal of Rheede,Sonneratia acida, *Willde.*
Blimbing bas, Blimbing basi, Malay, Averrhoa bilimbi, *Willde.*
Blim-bing-manis, Malay, Averrhoa carambola, *Linn., Willde.*
Blinbingan teres, *Rumph*, syn. of Averrhoa bilimbi, *Willde.*
Boay-gy-in, Burm., Bauhinia malabarica, *Roxb.*
Bodah or Bondago, Hind., Lagerstrœmia lanceolata.
Bodanki chettu, Tel., Balsamodendron agallocha, *W & A.*
Bodanta chettu, Tel., Bauhinia purpurea, *Linn.*
Bodda chettu, Tel., Ficus glomerata, *Roxb.*
Boddi chettu, Tel., Macaranga roxburghii, *Wall.*
Bodo jamo, Uria ? Eugenia jambolana, *Lam.*
Βδέλλιον Gr.,Commiphora madagascarensis, *Lindl.*
Bœhmeria salicifolia,syn. of Nussiessya hypoleuca,
Bo-gaha, Singh., Ficus religiosa, *Roxb.*
Bogu, Tel., Charcoal.
Bohira reora, Hind., Bignonia undulata, *Roxb.*
Bois d' aigle, Fr., Aquilaria agallocha, *Roxb.* Eagle wood.
Bois de Bresil, Fr., Cæsalpinia sappan, *Linn.*
Bois de colophane, Fr., Canarium commune, *Linn.*
Bois de couleuvre, Fr., Strychnos colubrina, *Linn.*
Bois de fer, Fr., Iron wood.
Bois du rose, Fr., Rosewood.
Bokaara-gass, Singh., Gomphia angustifolia, *Vahl.*
Bo-ke-mai-za, Burm., Kydia calycina, *Roxb.*
Bokmo, Uria, Cæsalpinia sappan, *Linn., Roxb.*
Bokur, Mahr., Cordia Rothii, *Rœm & Sch.*
Bombax gossypium, *Linn., Roxb.*, syn. of Cochlospermum gossypium, *DC. W. & A.*
Bombax heptaphyllum, Cav. syn. of Bombax Malabaricum, *DC. W. & A.*
Bombax pentandrum, *Linn.*, syn. of Eriodendron anfractuosum, *DC., W. & A. W. Ic.*

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Bombax pentaphyllum syn. of Bombax malabaricum, *DC., W. & A.*

Bombay Black-wood, Eng., Cassia florida, *Vahl.*

Bombi, Singh., Symplocos spicata, *Roxb.*

Bo-mee-gass, Singh., Tetranthera roxburghii.

Bo-pata, Tel., Stylocoryna bera, *A. Rich.*

Bondara, Bondarah, Mahr., Lagerstrœmia parviflora, *Roxb.*, Lagerstrœmia macrocarpa, *Roxb.*

Bonga, Bisaya, Areca catechu, *Linn.*

Bonga, Tag., Areca catechu, *Linn.*

Bongas jampac, Malay, Michelia champaca, *Linn.*

Bongu veduru, Tel., Bambusa.

Bon khejur, Beng., Caryota urens, *Linn.*

Boohora-gass, Singh., Dipterocarpus hispidus, *Thw.*

Booinch, Beng., Flacourtia sapida, *Roxb.*

Boo-kanda-gass, Singh., Rottlera tetracocca, *Roxb.*

Booloo-gass, Singh., Terminalia belerica, *Roxb.*

Boo-Mai-za, Burm., Albizzia stipulata, *Boiv.*

Boot-kus, Mahr., Elæodendron roxburghii, *W. & A.*

Bor, Mahr., Zizyphus jujuba, *Willde.*

Borassus gomutus, *Lour.*, syn. of Arenga saccharifera, *Labill.*

Boroana, Uria, Cratæva, *Species.*

Barodha, Uria, Bauhinia variegata, *Linn.*

Bosonto-gundi, Uria, Rottlera tinctoria, *Roxb.*

Bosso, It., Bossolo, It., Boxwood, Buxus.

Boswellia serrata, *Stach.*, syn. of Boswellia thurifera, *Roxb.*

Botku, Tel., Hemigymnia macleodii, *Griff.*

Boue-bayuza, Burm., Excœcaria agallocha, *Linn.*

Bouro-janti, Beng., Sesbania ægyptiaca, Pers.

Bouro, Uria,, Bombax malabaricum, *DC., W. & A.*

Boxwood, Eng., Buxus.

Brab tree, Eng., Borassus flabelliformis, *Linn.*

Brah, Panjab, Rhododendron arboreum, *Sm.*

Branch flowered cynometra, Eng., Cynometra ramiflora, *Linn.*

Brankul, Panjab, Ulmus campestris, *L.*

Brari, Panjab, Ulmus campestris, *L.*

Bras of Chamba, &c., Rhododendron arboreum, *Sm.*

Brasiletto wood, Eng., Cæsalpinia sappan, *Linn.*

Brasilienholz, Ger., Cæsalpinia sappan, *Linn.*

Brasilienhout, Dut., Cæsalpinia sappan, *Linn.*

Brazil wood, Eng., Cæsalpinia sappan, *Linn.*

Brazilian plum, Eng., Spondias dulcis, *Forst.*

Bre of Kanawar, Quercus ilex, *Linn.*

Bread-fruit tree, Eng., Artocarpus incisa, *Linn., f.*

Bridelia retusa, *Spr.*, syn, of Bridelia montana.

Bridelia spinosa, *Roxb.*, syn, of Bridelia montana.

Broad-leaved sepistan, Eng., Cordia latifolia, *Roxb.*

Bruguiera gymnorrhiza, *Lam.*, syn, of Bruguiera Rheedii, *L'Herit.*

Bruguiera Madagascariensis, *DC.*, syn. of Lumnitzera racemosa, *Willde.*

Bua-alu, *Marquesa*, Santalum album, *Linn.*, *Roxb.*

Bua lontar, Malay., Borassus flabelliformis, *Linn.*

Bubbe mara, Can., Calophyllum calaba, *Linn.*

Buchsbaum, Ger., Buxus, Box-wood.

Buckthorn, Eng., Hippophae salicifolia.

Budada-nedi, Tel., Careya arborea, *Roxb.*

Budanar memoka Kangra, Marlea begonifolia, *Rb.*

Budareni, Tel., Capparis divaricata, *Lam.*

Budderi, Sans., Zizyphus jujuba *Willde, Lam.*

Buddhs cocoanut, Eng., in Burmah, Sterculia alata *Roxb.*

Budu muru, Tel., Sponia orientalis, *Voigt.*

Buffalo thorn, Eng., Acacia latronum, *Willde.*

Buhura, Beng., Terminalia belerica, *Roxb.*

Buhira, Beng., Terminalia rubrica ?

Buhuari, Beng., Cordia latifolia, *R.*, B. myxa, *L.*

Buis, Fr., Buxus, Box-wood.

Bujoon, Beng., Corypha elata, *Roxb.*

Buka, Sans., Agati grandiflorum, *Desv.*

Bukampadaruka, Sans., Cordia myxa, *Linn.*

Bukayun, bukain, Pers., Melia sempervirens, *R.*

Bukbur, Ar., Cassia fistula, *Linn.*

Bukkapu chettu, Tel., Cæsalpinia sappan, *Linn.*

Buko, Beng., Agati grandiflorum, *Desv.*

Buli ? Beng., Sterculia urens, *Roxb.*

Bulla, Duk., Terminalia belerica, *Roxb.*

Bully or Bulli tree, Eng., Achras sapota, *Linn.*

Buloositoon rooman yunani, Punica granatum, *L.*

Buluh, Malay, Bambusa.

Buna of Kaghan, Albizzia odoratissima, *Benth.*

Buna, Bu-in, bunin, Panj., Platanus orientalis, L.

Bundaroo, Tel. of Godavery, Nauclea cordifolia, R.

Bundaru, Hind., Hymenodyction excelsum, *Wall.* in *Fl. Ind.*

Bunius sativus, *Rumph*, syn. of Antidesma bunias, *Spreng.*

Bun uch, Beng., Morinda exserta, *Roxb.*

Burhul, Beng., Artocarpus lakoocha, *Roxb.*, *W. Ic.*

Burija, Tam., Hymenodyction excelsum, *Wall.*

Burja, Tam., Hymenodyction excelsum, *Wall.*

Burmese sassafras wood, Laurus glandulifera ?? *Wall.*

Burmese varnish tree, Eng., Melanorrhæa usitatissima, *Wall.*

Buro kukur chettu, Uria, Tetranthera.

Buro ritha, Beng., Sapindus emarginatus, *Vahl.*

Burra jamon, Hind., Eugenia jambolana, *Lam.*

Burramunga, Hind., Canthium parviflorum, *Lam.*

Burra nuge, Can., Olea dioica, *Roxb.*

Burrul mara, Can., Bombax, *Species.*

Bursera paniculata, *Lam.*, syn. of Canarium commune, *Linn.*

Bursera serrata, *Wall.*, syn. Icica indica, *W. & A.*

Buruch-gass, Singh., Chloroxylon swietenia, *Roxb.*

Buruga, Tel., Buruga manu, Tel., Eriodendron anfractuosum, *DC.*, Bombax malabaricum, *DC.*

Burute, Singh., Chloroxylon swietenia, *Roxb.*

Bushan of Upper Chenab, Salix alba, *Linn.*

Bush-randia, Eng., Randia dumetorum, *Lam.*

Busso, It., Buxus, Boxwood.

But, Beng., Ficus indica, *Linn.*, *Roxb.*

Buta karamee, Tel., Nauclea parvifolia, *Roxb.*

Butalli maram, Tam., Givottia rottleriformis,

Butna, Panjab, Fraxinus xanthoxylloides.

Butonica speciosa, *Lam.*, syn. of Barringtonia speciosa, *Linn.*

Butonica sylvestris alba, *Rumph*, syn. of Barringtonia racemosa, *Roxb.*

Bwai-jin, Burm., Bauhinia brachycarpa, *Wall.*, B. racemosa, *Lam.*

Byew, Burm., Dillenia scabrella, *Roxb.*

By-it-zin, Burm., Antidesma paniculatum, *Roxb.*

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Caoutchouc tree, Eng., Ficus elastica, *Roxb.*
Cabo negro, *Sp.*, Gomuto, Malay.
Cabbage palm, Eng., Areca oleracea, *Linn.*
Cadali pua, Tam., Lagerstrœmia reginæ, *Roxb.*
Caha milile? Singh., Vitex trifolia, *Linn.*
Chamkharak, Panjab, Carpinus viminea.
Cajanus indicus, *Spr.*, syn. of Cytisus cajan, *Linn.*
Cakay, Can., Cassia fistula, *Linn.*
Calaba tree, Eng., Calophyllum calaba, *Linn.*
Calamander maram, Tam., Calamander wood, Diospyros hirsuta, *Linn. fil.*
Calamus petræus, *Lour.*, syn. of Calamus rotang, *Linn.*, *Roxb.*
Calamus roxburghii, *Griff.*, *Royle*, syn. of Calamus rotang, *Linn.*, *Roxb.*
Calapa, Malay, the nut of Cocos nucifera, *Linn.*
Calappas, *Rumph*, syn. of Cocos nucifera, *Linn.*
Calophyllum apetalum, *Willd.*, syn. of Calophyllum calaba, *Linn.*
Calophyllum bintagor, *Roxb.*, syn. of Calophyllum inophyllum, *Linn.*, *Roxb.*
Calophyllum calabioides, *G. Don.*, syn. of Calophyllum calaba, *Linn.*
Calophyllum decipiens, *Wight Ill.*, syn. of Calophyllum calaba, *Linn.*
Calophyllum spurium, *Choisy*, syn. of Calophyllum calaba, *Linn.*
Calophyllum wightiana, *Wall.*, syn. of Calophyllum calaba, *Linn.*
Calotropis gigantea, *Andr.*, syn. of Calotropis procera, *R. Br.*
Calu-keale, Singh., Butea frondosa, *Roxb.*, *W. & A.*
Calu midiriya, Sing., Diospyros hirsuta, *Linn. fil.*
Calyptranthes caryophyllifolia, *Ains.*, syn. of Eugenia caryophyllifolia, *Roxb.*, *W. & Ic.*
Calyptranthes jambolana, *Willde*, syn. of Eugenia jambolana, *Lam.*, *Roxb.*
Cambessedia, *Kunth*, syn. of Buchanania angustifolia, *Roxb.*
Cambogia gutta, *Linn.*, syn. of Garcinia gutta, *R. W.*
Camel thorn, Eng., Alhagi maurorum, *Tourne. W. & A.*
Cameraria zeylanica, *Moon Ct.*, syn. of Gyrinops walla, *Gært.*
Camirium cordifolium, *Gært.*, syn. of Aleurites triloba, *Forst*, *Roxb.*
Camphire of the Song of Solomon, Lawsonia alba, *Lam.*, *W. & A.*
Camphora officinarum, *Nees.*, Laurus camphora, *Linn.*
Camunium sinense, *Rumph*, syn. of Aglaia odorata, *Lour.*
Canara amra, Sans., Spondias mangifera, Pers.
Canarium balsamiferum, *Willd.*, syn. of Boswellia glabra, *Roxb.*, *W. & A.*
Canarium mehenbethene, *Gært.*, syn. of Canarium commune, *Linn.*
Canarium vulgare, *Rumph.*, syn. of Canarium commune, *Linn.*
Cane, Eng., Calamus rotang, *Linn.*, *Roxb.*
Canela, Sp., Cinnamomum zeylanicum, *Nees.*
Canella, It., Lat., Port., Cinnamomum zeylanicum, *Nees.*
Cannelle, Fr., Cinnamomum zeylanicum, *Nees.*
Canthium coronatum, *Lam.*, syn. of Randia dumetorum, *Lam.*
Canthium corymbosum, Pers., syn. of Stylocoryna webera, *A. Rich.*
Canthium umbellatum, *Wight*, syn. of Canthium didymum, *Gært.*
Capparis bisperma, *Roxb.*, syn. of Capparis grandis, *Linn.*
Capparis brevispina? *Gibson*, Capparis grandis, *Linn.*
Capparis grandis, *Klein.*, syn. of Capparis grandis, *Linn.*
Capparis maxima, *Heyne* in *Roth.*, syn. of Capparis grandis, *Linn.*
Capparis trifoliata, *Roxb.*, syn. of Cratæva Roxburghii, *R. Br.*, *W. & A.*
Capparis zeylanica, *Roxb.*, syn. of Capparis horrida, *Linn.*, *W. & A.*, *Ic.*
Carallia integrifolia, *Grah.*, syn. of Carallia lucida, *Roxb.*
Carallia integerrima, *DC.*, syn. of Carallia lucida, *Roxb.*
Carambola, Port., Averrhoa carambola, *Linn.*
Caranosi, *Rheede*, Vitex trifolia, *Linn.*
Carapa moluccensis, *Lam.*, syn. of Xylocarpus granatum, *Kœn.*, *W. & A.*
Carbalho, Port., Oak.
Carbo ligni, Lat., Charcoal.
Carbon Eng., Charcoal.
Carbone de legna, It., Charcoal.
Carbon de lena, Sp., Charcoal.
Carbonium, Lat., Charcoal.
Carey's tree, Eng., Careya arborea, *Roxb.*
Caryon, Greek, Juglans regia, *Linn.*
Caryophyllus aromaticus, *Linn.*, syn. of Eugenia caryophyllata, *Thun.*
Carria speciosa, *Gardn.*, syn. of Gordonia speciosa, *Thw.*
Carri vembu maram, Tam., Garuga pinnata, *Roxb.*
Carru maradu, Tam., Terminalia tomentosa, *W. & A.*
Carruwa puttay, Tam., Cinnamomum zeylanicum, *Nees.*
Cashew nut tree, Eng., Anacardium occidentale, *Linn.*
Casse fistuléuse, Fr., Cassia fistula, *Linn.*
Cassia javanica, Cathartocarpus javanicus.
Cassia marginata, *Roxb.*, syn. of Cathartocarpus Roxburghii.
Cassia nodosa, syn. of Cathartocarpus nodosus, *Voigt.*
Cassia pula, Lat., Cassia fistula, *Linn.*
Cassia purgante, Port., Cassia fistula, *Linn.*
Cassia senna. *Roxb.*, Cassia florida, *Vahl.*
Cassia sumatrana, *Roxb.*, syn. of Cassia florida, *Vahl.*
Cassuvium pomiferum, *Lam.*, *Rheede*, syn. of Anacardium occidentale, *Linn.*
Catechu tree, Eng., Acacia catechu, *Willde.*
Catechu palm, Eng., Areca catechu, *Linn.*
Catappa, Malay, Terminalia catappa, *Linn.*, *Roxb.*
Catha montana, *Forsk.*, syn. of Celastrus montana, *Roxb.*, *W. & A.*, *W. Ic.*
Cathartocarpus fistula, Pers., syn. of Cassia fistula, *Linn.*

Cathartocarpus marginatus, *G. Don*, syn. of Cathartocarpus roxburghii.
Cattu-elupa, Tam., Terminalia belerica, *Roxb.*
Caungœ, Maleal., Areca catechu, *Linn.*
Cavallium urens, syn. of Sterculia urens, *Roxb.*
Cavamillea Philippensis, *Desrouss*, syn. of Diospyros mabola, *Roxb.*
Cavita vriksa, Can., Feronia elephantum, *Corr.*
Cavughu, Maleal, Areca catechu, *Linn.*
Caya-vang-dee? Coch-China, Sassafras wood.
Cay-me, Coch-China, Tamarindus indica, *Linn.*
Ceanothus Asiaticus, *Linn.*, syn. of Colubrina Asiatica, *R. Br.*
Ceanothus capsularis, *Roxb*, syn. of Colubrina Asiatica, *R. Br.*
Cedar wood, Eng., Hymenodyction excelsum, *Wall.* in *Fl. Ind.*
Ceder, Dut., Cedar.
Cedre, Fr., Cedar.
Cedrela hexandra, *Wall.*, syn. of Cedrela toona, R.
Cedro, It., Sp., Cedar.
Cedrus, Lat., Cedar.
Cedrus deodara, syn. of Larix deodara.
Ceiba pentandra, *Gœrtn*, syn. of Eriodendron anfractuosum, *DC.*, *W. & A.*, *W. Ic.*
Celastrus verticillata, *Roxb.*, syn. of Pittosporum floribundum, *W. & A.*
Celtis orientalis, *Roxb.*, syn. of Sponia orientalis, *Voigt.*
Cephalanthus pilulifer, *Lam.*, syn. of Nauclea parvifolia, *Roxb.*, *Willde.*
Cerasus cornuta, *Royle*, syn. of Prunus padus, *Linn.*
Cerbera lactaria, *Buch.*, syn. of Cerbera manghas, *Linn.*
Cerbera quaternifolia, *Roxb.*, syn. of Cerbera manghas *Linn.*
Cerbera thevetis, *Don*, *Mill*, syn. of Thevetia neriifolia, *Juss.*
Cerebera thevetii, *Linn.*, syn. of Thevetia neriifolia, *Juss.*
Ceriscus malabaricus, *Gœrtn.*, syn. of Randia dumetorum, *Lam.*
Ceylon cork tree, Eng., Sonneratia acida, *Willde.*
Ceylon Oak, Eng., Schleichera trijuga, *Willde.*
Ceylon tea tree, Eng., Elæodendron glaucum, Pers.
Chachiyon of Kangra hills, Rhododendron, arboreum, *Sm.*, *W. Ic.*

Chadachy maram, Tam., Grewia tiliæfolia, *Vahl.*
Chadacula, Tel., Vateria indica, *Linn.*
Chai-bin, Burm., Semecarpus anacardium, *Linn.*
Chal, Panjab, Conocarpus latifolia, *Roxb.*
Chalita, Beng., Dillenia speciosa, *Thunb.*, *Rheede*,
Chalo-dhona, Uria, Erythrina indica, *Lam.*
Chaolmugra, Hind., Chaulmoogra odorata.
Chalta, Beng., Dillenia speciosa, *Thunb.*, *Rheede*,
Chalun of Kotgarh, Populus ciliata, *Wall.*
Chamba of Kaghan, Prinsepia utilis, *Royle.*
Chambara, Mahr., Premna tomentosa, *Willde*,
Chambcolii, Duk., Bauhinia vahlii, *W. & A.*
Chami, Tel., Prosopis spicigera, *W. & A.*
Chamiari of Jhelum, Prunus puddum, *Lind.*
Chamkat of Murree, Desmodium tiliæfolium.
Chamaree, Mahr., Premna integrifolia, *Roxb.*
Chamakri, Hind., Michelia champaca, *Linn.*
Chamror, Hind., Ehretia aspera.
Chamote, Hind., Michelia champaca, *Linn.*
Champ of Chenab, Alnus, *Species.*
Champa, Beng., Champaka, Beng., Sans., Champakam, Maleal., Champakamu, Tel., Michelia champaca, *Linn.*
Champeyamu, Tel., Michelia champaca, *Linn.*
Chamresh or Simbar, Rhododendron campanulatum.
Chanam ; chanini, Panj., Populus alba, *Linn.*
Chanda, Can., Macaranga roxburghii, *Wall.*
Chandan, Mahr., Santalum album, *Linn.*, *Roxb.*
Chandana, Beng., Hind., Pterocarpus santalinus, *Linn.*
Chandana, Beng., Hind., Malay, Maleal., Sans., Santalum album, *Linn.*, *Roxb.*
Chandanam, Tam.. Tel., Santalum album, *Linn.*, *Roxb.*
Chandanapu chettu, Tel., Santalum album, *Linn.*, *Roxb.*
Chandra, Tel., Acacia sundra, *DC.*
Changma of Lahoul, Populus balsamifera, *Linn.*
Chanuni of the Chenab, Populus alba, *Linn.*
Chaplash, Hind., Artocarpus chaplasha, *Roxb.*
Char, Mahr., Buchanania latifolia, *Roxb.*, *W. & A.*
Chara, Sans., Tel., Buchanania latifolia, *Roxb.*
Chara, Tel., Buchanania intermedia, *W. Ic.*
Chara pappu, Tel., Buchanania latifolia, *Roxb.*
Charai or chalai of Kaghan, Juniperus excelsa, *Bieb.*

Charai, Panj., Quercus ilex, *Linn.*
Chari, Pushtu, Quercus ilex, *Linn.*
Charaoli, Hind., Buchanania latifolia, *Roxb.*
Charbon, Fr., Charbon de bois, Fr., Charcoal.
Chardul of the Talmud, Salvadora persica, *Linn.*
Charmagz, Pers., Juglans regia, *Linn.*
Charo, Uria, Tel., Buchanania latifolia, *Roxb.*
Charu mamidi, Tel., Buchanania latifolia, *Roxb.*
Chaste tree, Vitex arborea, *Roxb.*
Chaterni of Sutlej, Rhamnus purpureus, *Royle.*
Chatinn, Beng., Alstonia scholaris, *R. Br.*
Chatta matta,. Tel., Gardenia gummifera, *Linn.*
Chayan ka-yoe, Burm., Amoora rohituka, *W. & A.*
Chechua, Gond., Albizzia odoratissima, *Benth.*
Chedy, Tam., Tree.
Chendu phul, Hind., Parkia biglandulosa, *W. & A.*
Chendurapu chettu, Tel., Rottlera tinctoria, *R.*
Chelat pipul, Beng., Stillingia sebifera, *Willde.*
Chem-maram, Maleal., Amoora rohituka.
Chene, Fr., Oak, Eng.
Chennaaree of the Kader race, Unona pannosa, *Dalz.*

Cher of Chenab, Armeniaca vulgaris.
Cheru pinnai, Tam., Calophyllum calaba, *Linn.*
Cheerie, Sans., Mimusops hexandrus, *Roxb.*, *W. Ic.*
Cheer, Hind., Pinus longifolia, *Lamb.*, *Roxb.*
Chetippa, Tam., Hymenodyction excelsum, *Wall.*
Chetippa of Circars, Tel., Hymenodyction, *Species.*
Chettu, Tel., Timber Tree, Eng.
Cheetz, Mahr., Tamarindus Indica, *Linn.*, *Roxb.*
Chichra, Panjab, Butea frondosa, *Roxb.*, *W. & A.*
Chickolee of Central Provinces, Sponia orientalis.
Chickrassia minmonii, Grah., syn. of Chickrassia velutina, *Wall.*
Chicon ? Beng., Sponia orientalis, *Voigt.*
Chijla Panjab, Fraxinus xanthoxylloides.
Chikan, Panjabi, Euonymus fimbriata, *Wall.*
Chikati manu ? Tel., Mesua ferrea, *Linn.*, *DC.*
Chikni, Panj., Buxus sempervirens, *L.*
Chikrassi, Beng., Chickrassia tabularis *Ad Juss.*
Chikri of Kanawar, Buxus sempervirens, *L.*
Chikul mara, Can., Albizzia elata.
Chil, Panj., Pinus longifolia, *Lamb.*, *Roxb.*
Chila, Panj., Casearia tomentosa, *Roxb.*
Chilas of Kullu, Beas, Cedrus deodora, *Loud.*
Chilgozeh, Pusht., Pinus gerardiana, *Wall.*

Chilla dudugu, Tel., Guatteria cerasoides, *Duval.*

Chilla, Panj., Casearia tomentosa, *Roxb.*

Chilla chettu, Tel., Strychnos potatorum, *L.*

Chillaghinzalu chettu, Tel., Strychnos potatorum, *L., Willde.*

Chilla ginja chettu, Tel., Strychnos potatorum, *L., Willde.*

Chilla of Jhullundhur, Wendlandia cinerea ?

Chilbinj-ka-jhar, Hind., Strychnos potatorum, *L.*

Chilrow of Northern Himalaya, Pinus webbiana, *Wall. & Lamb.*

Chima-punji, Maleal, Cochlospermum gossypium, *DC., W. & A.*

Chimnanu, Lahoul, Chenab, Amygdalus persica.

Chimu, Panj., Syringa emodi, *Wall.*

Chinangee, Tel., Lagerstrœmia parviflora, *Roxb.*

China karinguva, Tel., Gardenia lucida, *Roxb.*

Chin-ki-tut, Hind., Morus sinensis.

China moralli, Tel., Buchanania latifolia, *Roxb.*

Chinar, Pers., Platanus orientalis, *Linn.*

Chinduga, Tel., Albizzia stipulata, *Boiv.*

Chinna botuku, Tel., Cordia angustifolia, *Roxb.*

Chinnangi, Tel., Lagerstrœmia macrocarpa, *R.*

Chinna nagi, Tel., Lagerstrœmia parviflora, *Roxb.*

Chinna jami, Tel., Acacia cineraria, *Willd.*

Chinna kalinga, Tel. & Can., Dillenia pentagyna, *Roxb., W. & A.*

Chinta chettu, Tel., Tamarindus indica, *Linn.*

Chinta pandu, Tel., Tamarindus indica, *Linn.*

Chipal, Panjab, Ulmus erosa? also U. pumila, *Pall.*

Chir of Chamba, Armeniaca vulgaris.

Chir, Panj., Pinus longifolia, *Lamb., Roxb.*

Chiri, Sans., Mimusops hexandrus, *Roxb., W. Ic.*

Chiri, Panj., Pinus gerardiana, *Wall.*

Chiri bikki, Tel., Gardenia gummifera, *Linn.*

Chir chiran, and sari, Ravi, Prunus armeniaca.

Chirr dudduga, Tel., Alphonsea lutea, *H. f. & T.*

Chiri manu, Tel., Conocarpus latifolia, *Roxb.*

Chiri, Sans., Wrightia antidysenterica, *R. Br.*

Chiroli, t'ser-kuji chuli, chur-sari, Chenab, Prunus armeniaca.

Chirongia sapida, *Buch.*, syn. of Buchanania latifolia, *Roxb., W. & A.*

Chironji, Hind., Buchanania latifolia, *Roxb.*

Chirugu, Tel., Caryota urens, *Linn.*

Chita bagnu, Panj., Populus alba, *L.*

Chitari, Panj., Quercus ilex, *Linn.*

Chitka, Beng., Bauhinia acuminata, *Linn., Roxb.*

Chitaka mraku, Tel., Xanthochymus pictorius, *Roxb.*

Chiti sirin, Panjab, Cedrela toona var: Serrata, *Royle.*

Chit patra of Jhelum and Kaghan, Marlea begonifolia, *Roxb.*

Chitra, Hind., Berberis lycium, *Royle.*

Chitraka, Tel., Limonia pentagyna.

Chitta duduka, Tel., Guatteria cerasoides, *Duval.*

Chitta tumiki, Tel., Diospyros tomentosa. *Roxb.*

Chitti aukudu, Tel., Wrightia tinctoria, *R. B.*

Chittigong chettu, Tel., Chickrassia tabularis, *A. J.*

Chittigong karra, Tel., Chickrassia tabularis, *A. J.*

Chittagongwood, Eng., Chickrassia tabularis, *A. J.*

Chiu, Panj., Armeniaca vulgaris.

Chlo-aini, Burm., Eriolæna, *Species.*

Chloroxylon dupada, *Ains.*, syn. of Vateria indica, *Linn.*

Choar kulli maram, Tam., Soymida febrifuga, *A. J.*

Chob, Pers., Timber.

Chob-i-pao, Kash., Fothergillia involucrata.

Choda of Hazara, Pyrus baccata.

Chonemorpha antidysenterica, *G. Don.*, syn. of Holarrhena antidysenterica, *Wall.*

Chora of Kaghan, Quercus ilex, *Linn.*, also, Q., dilatata, *Lindl.*

Chota akunda, Hind., Calotropis herbacea, *Carey.*

Chota of Lahoul, Quercus ilex, *Linn.*

Choto jam, Beng., Eugenia caryophyllifolia, *Roxb.*

Chotta of Kaghan, Pyrus kumaonensis.

Chouk maram, Tam., Casuarina equisitifolia.

Chovanna-mundari, Mal., Bauhinia variegata, *L.*

Christ's Thorn, Eng., Paliurus aculeata.

Chrysophyllum acuminatum, *Roxb., Fl. Ind.*, syn. of Chrysophyllum Roxburghii, *G. Don.*

Ch'tra of Murree and Hazara, Staphylea emodi ?

Chual, Panjab, Euonymus fimbriata, *Wall.*

Chunduna, Duk., Santalum album, *Linn.*

Chu-i of Pangi, Pyrus malus, *Linn.*

Chuj, Panjab, Fraxinus xanthoxylloides.

Chuli, Ladak, Prunus armeniaca.

Chum, Panjab, Fraxinus xanthoxylloides.

Chumpa, Duk., Michelia champaca, *Linn.*

Chumyari of Murree Hills, Cerasus puddum.

Chun, Hind., Euphorbia royleana.

Chune, Maleal., Cassia fistula, *Linn.*

Chung, Panj., Salix alba, *Linn.*

Chung, also Chunt of Pangi and Chenab, Pyrus malus, *Linn.*

Chur, Panj., Quercus ilex, *Linn.*

Cinchona excelsa, *Roxb.*, syn. of Hymenodyction excelsum, *Wall.*

Cinnamomum, Lat., Cinnamomum zeylanicum, *Nees.*

Cinnamomum cassia, *Blume*, syn. of Cinnamomum aromaticum, *Nees* v. *Esen.*

Cinnâmon, Cinnamon tree, Cinnamomum zeylanicum, *Nees.*

Cissus arborea, *Forsk.*, syn. of Salvadora persica *Linn., W. Ic.*

Citrus nobilis, *Lour.*, syn. of Citrus aurantium, *Linn.*

Claoxylon digynum, *Wight*, Rottlera digyna, *Thw.*

Clearing nut tree, Strychnos potatorum, *L. Willde.*

Clethropsis nitida, *Spach.*, syn. of Alnus, *Species.*

Clove tree, Eng., Eugenia caryophyllata, *Thun.*

Cluytia collina, *Roxb.*, syn. of Amanoa collina, *Baillon.*

Cluytia patula, *Rox.*, syn. of Amanoa patula, *Thw.*

Cluytia spinosa??? syn. of Amanoa spinosa???

Cluytia spinosa, *Roxb.*, syn. of Briedelia spinosa, *Willde, Roxb.*

Coaya maram, Tam., Psidium pyriferum, *Linn.*

Cobare aku, Tel., Cadjan, Malay.

Cobri, Can., Cocos nucifera, *Linn.*, its oil.

Cocchi, It., Cocos nucifera, *Linn.*, the nut.

Cocoanut, Eng., Cocos nucifera, *Linn.*

Cocos, Fr., Sp., Cocos nucifera, *Linn.*, the nut.

Cocos nypa, *Lour.*, syn. of Nipa fruticans.

Codaga pala, Maleal, Wrightia antidysenterica, *R. Br.*, the bark.

Coia pallum, Tam., Psidium pyriferum, *Linn.*

Coir, Eng., Hind., fibre of Cocos nucifera, *L.*

Colbertia coromandeliana, *DC.*, syn. of Dillenia pentagyna, *Roxb., W. & A.*

Colong-gass, Singh., Nauclea cordifolia, *Roxb.*

Colophonia Mauritiana, *D.C.*, syn. of Canarium commune, *Linn.*

Colymbeya excelsa, *Spreng.*, syn. of Araucaria excelsa, *R. Br.*

Combretum decandrum, syn. of Terminalia parviflora, *Thw.*

Common Andromeda, Eng., Andromeda ovalifolia, *Don.*
Common bead tree, Eng., Melia azedarach, *Linn.*
Common bread tree, Eng., Lunu midelle, Singh.
Common hedgeplant, Eng., Euphorbia tiraculli, *Linn*
Common oak, Eng., Quercus incana Q. semecarpifolia.
Common orange, Eng., Citrus aurantium, *Linn.*
Common sapota, Eng., Achras sapota, *Linn.*
Common walnut tree, Juglans regia, *Linn.*
Conda than-kaia, Tel. Sterculia folis digitatis, *Ains*
Condondong, *Rumph*, Spondias mangifera, Pers.
Conessi bark tree, Eng., Wrightia antidysenterica, *R. Br.*
Conessie, Fr., Wrightia antidysenterica, *R. Br.*, the bark.
Cong-gass, Singh., Schleichera trijuga, *Willd.*
Conta banso, Uria, Bambusa spina.
Contaya-kulli, Tel., Zizyphus, *Species.*
Coojee jamo, Uria, Eugenia jambolana, *Lam.*
Coongilliya maram, Tam., Rhus, *Species.*
Coral tree, Erythrina indica, *Lam.*, E. stricta, *Roxb.*
Cordia cuniata, *Heyne*, syn. of Cordia rothii, *Rom. & Sch.*
Cordia domestica, *Roth.*, syn. of Cordia myxa, *Linn.*, *Roxb.*
Cordia domestica, *Roxb.*, syn. of Cordia obliqua, *Willd.*
Cordia incana, *Royle*, syn. of Cordia vestita, *H. f. et T.*, of Gynaion vestitum, *DC.*
Cordia MacLeodii, *Beddome*, Hemigymnia macleodii, *Griff.*
Cordia officinalis, *Lam.*, syn. of Cordia myxa, *L.*
Cordia reticulata, *Roxb.*, syn. of Cordia angustifolia, *Roxb.*
Cordia tomentosa, *Wall.*, syn. of Cordia obliqua, *Willd.*
Cordia vestita, *H. & Th.*, syn. of Gynaion vestitum, *DC.*
Cordia Wallichii, *G. Don.*, W. *C.*, syn. of Cordia obliqua, *Willd.*
Cork tree, Eng., Millingtonia hortensis, *Linn. fil.*
Cornus sanguinea, *Forsk.*, syn. of Cordia myxa, *L.*
Coromandel ebony, Diospyros melanoxylon, *Roxb.*
Coromandel Gooseberry tree, Eng., Averrhoa carambola, *Linn.*, *Willde.*
Coronilla coccinea, *Willde*, syn. of Agati grandiflorum, *Desv.*
Coronilla grandiflora, *Willde*, syn. of Agati grandiflorum, *Desv.*
Coronilla sesban, *Willd.*, *Roxb.*, E. I. M., syn. of Sesbania ægyptiaca, Pers.
Corte-de-pala, Port., Wrightia antidysenterica, *R. Br.* The bark.
Cortex caryophylloides, *Rumph.*, syn. of Cinnamomum culitlawan, *Nees.*
Corunga munje mara, Can., Rottlera tinctoria, *Rxb.*
Corylus jacquemontii, *Dne.*, syn. of Corylus colurna, *L.*
Corylus lacera, *Wall.*, syn. of Corylus colurna, *L.*
Country almond tree, Terminalia catappa, *Linn.*
Country mignonette, Eng. of Ceylon, Lawsonia alba, *Lam.*
Country walnut, Eng., Aleurites triloba, *Forst.*
Courbaril, Locust tree, Eng., Hymenæa courbaril, *Linn.*
Covellia glomerata, Mig., syn. of Ficus glomerata, *Roxb.*
Cowa, Hind., Garcinia roxburghii, *R. W.*
Crab ash, Eng., Fraxinus xanthoxylloides.
Cratæva inermis, *Linn.*, syn. of Cratœva nurvala, *Buch.*, *Ham.*
Cratæva marmelos, Linn., syn. of Ægle marmelos, *Corr.*
Cratæva odora, *Ham.*, syn. of Cratæva roxburghii, *R. Br.*, *W. & A.*
Cratæva tapi, Burm., syn. of Cratæva nurvala, *Buch.*, *Ham.*
Cratœva tapia, *Vahl.*, syn. of Cratæva roxburghii, *R. Br.*, *W. & A.*
Cratæva vullanga, *Kon.*, Feronia elephantum, *Corr.*
Crawn, Dut., Port., Iarvini, Tam.
Croton coccineum, *Vahl.*, syn. of Rottlera tinctoria, *Roxb.*
Croton punctatum, *Retz.*, syn. of Rottlera tinctoria, *Roxb.*
Croton sebiferum, *Linn.*, syn. of Stillingia sebifera, *Willde.*
Cryptocarya floribunda, syn. of Cryptocarya wightiana, *Thw.*
Cuchunar, Hind., Bauhinia acuminata, *Linn.*
Cucumber tree, Eng., Averrhoa bilimbi, *Willde.*
Culaka ? Sans., Strychnos nux vomica, *Linn.*, *Roxb.*
Cumba karra, Tel., Gmelina, *Species.*
Cumba wood, Anglo-Tel., Gmelina, *Species.*
Cumbi, Tel., Careya arborea, *Roxb. Corr.*
Cumbi, Tam., Gardenia lucida, *Roxb.*, *W. & A.*
Cumbia, Can., Careya arborea, *Roxb.*, *Corr.*
Cummi maram ? Tam., Gmelina arborea, *Roxb.*
Cundal panai maram, Tam., Caryota urens, *Linn.*
Cupania sapida, *Cambess*, syn. of Blighia sapida, *Kon.*
Cupia corymbosa, *DC.*, syn. of Stylocoryna webera, *A. Rich.*
Cupressus japonica, *Thunb.*, syn. of Cryptomeria japonica, *D. Don.*
Curayia, Guz., Hind., Wrightia antidysenterica, *R. Br.*, the bark.
Curaija, Guz., Wrightia antidysenterica, *R. Br.*, the bark.
Curry-leaf tree, Eng., Bergera konigii, *Linn.*
Curry murdah wood, Anglo-Tam., Terminalia glabra, *W. & A.*
Curve-eyed maple, Eng., Acer cultratum, *Wallich.*
Cusharatha mara, Can., Embryopteris glutinifera, *Roxb*
Cussambium pubescens, *Buch.*, syn. of Schleichera trijuga, *Willde.*
Cutapa, Sans., Strychnos nux vomica, *Linn.*, *Roxb.*
Cutchay cuttay maram, Tam., Lagerstrœmia macrocarpa, *Roxb.*
Cuveraca, Sans., Cedrela toona, *Roxb.*
Cynometra cauliflora, *Wall.*, syn. of Cynometra ramiflora, *Linn.*
Cypress, Eng., Cupressus sempervirens, *Willde.*

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Daanga, SINGH., Spathodea longiflora.
Dab, POL., Oak.
Dacrydium plumosum, *Don.*, syn. of Thuja doniana, *Hooker.*
Dadahirilla, SINGH., Ulmus integrifolia, *Roxb.*
Dadima chettu, TEL., Punica granatum, *Linn.*
Dadru, dadur, of Hazara and Murree, Rhamnus virgatus, *Roxb.*
Daduga, TEL., Nauclea cordifolia, *Roxb.*
Daghun ban, PANJ., Quercus incana.
Dahu of Panjab, Artocarpus integrifolia, *Linn.*
Da-hya of Panjab, Trophis aspera, *Retz.*
Duk, JAV., Gomuto, MALAY.
Dalbergia arborea, *Heyne*, syn. of D. frondosa, *R.*
Dalbergia arborea, *Willde*, syn. of Pongamia glabra, *Vent.*
Dalbergia krowree, R., syn. of D. robusta, *R.*
Dalbergia lanceolaria, *Moon*, syn. of fissicalyx, *Bentham.*
Dalbergia lanceolaria, *L. f.*, syn. of D. mooniana, *Thw.*
Dalbergia latifolia, *Gib.*, syn. of D. robusta, *Roxb.*
Dalbergia mooniana, *Thw.*, syn. of Fissicalyx, *Bentham.*
Dalcheenee, HIND., Cinnamomum zeylanicum, *Nees*
Dal-chini gach'h, BENG., Cinnamomum zeylanicum, *Nees.*
Dalim Darim, BENG., HIND., Punica granatum, *L.*
Dal mara, CAN., Chickrassia tabularis, *Ad. Juss.*
Dammara alba, *Rumph*, syn. of Dammara orientalis, *Rumph.*

Dammara australis, syn. of Agathis australis?
Dammara loranthifolia, syn. of Agathis loranthifolia? *Salisb.*
Dampel, HIND., Xanthochymus pictorius *Roxb.*
Damun, MAHR., Grewia tiliæfolia, *Vahl.*, *W. Ic.*
Damun, MAHR., Grewia obliqua.
Danti chettu, TEL., Celastrus montana, *Roxb.*
Daoura of Central Provinces, HIND., Conocarpus latifolia, *Roxb.*
Darakht, PERS., Tree.
Darakht-i-azad, PERS., Melia sempervirens, *Roxb.*
Darakht-i muql, PERS., Commiphora madagascarensis, *Lindl.*, *Fl. Med.*
Darakht-i-tamr-i-hindi, PER., Tamarindus indica, *L.*
Daral, Darali, Sutlej, Beas, Cedrela toona, var. serrata, *Royle.*
Darasita, SANS., Cinnamomum zeylanicum, *Nees.*
Darchil; dar-chir, of Chamba, Pinus excelsa, *Wall.*
Dareah, HIND., see Dereah.
Darimba, SANS., Punica granatum, *Linn.*
Daroo, PANJ., Quercus incana.
Darsini, ARAB., Cinnamomum zeylanicum, *Nees.*
Darsook mara, CAN., Grewia obliqua.
Daru, HIND., Punica granatum, *Linn.*
Daruk of Salt Range, Gynaion vestitum, *DC.*
Daruni, HIND., Punica granatum, *Linn.*
Dashri of Panjab, Ficus glomerata, *Roxb.*, *Willde.*
Date palm, ENG., Phœnix sylvestris, *Roxb.*
Davette, SINGH., Carallia zeylanica, *Wight's Ill.*
Davou, SANS., timber.
Dawadar, DUK., Erythroxylon areolatum?
Dawaniya, SINGH., Grewia tiliæfolia, *Vahl.*
Dawata gaha, SINGH., Carallia lucida, *Roxb.*
Daw-nee, BURM., Eriolæna, *Species.*
Dawol kurœndo, SINGH., Cassia cinnamomum.
Dawu-gas, SINGH., Conocarpus latifolia, *Roxb.*
Dawul-kurundu, SINGH., Litsæa zeylanica, *N. E.*
Dawura, MAHR., Conocarpus latifolia, *Roxb.*
Dea-phul, BENG., Artocarpus lakoocha, *Roxb.*
Deelen, DUT., Deals.
Deeyapara, SINGH., Wormia triquetra, *Rottl.*
Del, SINGH., Artocarpus hirusta, *Lam.*
Del-gaha, SINGH., Artocarpus nobilis, *Thw.*
Delima, MALAY, Punica granatum, *Linn.*
Demer-hindi, TURK., Tamarindus indica, *Linn.*
Dendrocalamus balcooa, *Voigt*, syn. of Bambusa balcooa, *Roxb.*
Dendrocalamus strictus, *Voigt*, syn. of Bambusa stricta, *Roxb.*
Dendrocalamus tulda, *Voigt*, syn. of Bambusa tulda, *Roxb.*
Deodar, ENG., Cedrus deodara, *Loud.*, also Chickrassia tabularis, *Ad. Juss.*, also Larix deodara.
Deodara of Kulu & Beas, Cupressus torulosa, *Don.*
Deodaru, DUK., Sethia indica, *DC.*, *W. & A.*
Deodhari, HIND., Erythroxylon areolatum?
Deo-kanchana, TEL., Bauhinia acuminata, *Linn.*
Dephal, BENG., Artocarpus lakoocha, *Roxb.*
Der of Chenab, PANJAB, Cedrela toona, var. serrata, *Royle.*
Desmanthus cinereus, *Willde*, syn. of Caillea cinerea.
Desmanthus cinereus, *Willde*, syn. of Dichrostachys cinerea, *W. & A.*

Deva-dara, HIND., Cedrus deodara, *Loud.*
Devadara, SANS., Erythroxylon areolatum?
Devadaram, TAM., Sethia indica, *DC.*, *W. & A.*
Deva-daru, TAM., Guatteria longifolia, *Wall.*
Devadari, TEL., Erythroxylon areolatum?
Deva kanchun, BENG., Bauhinia purpurea, *Linn.*
Devatharam, TAM., Erythroxylon areolatum?
Devidiar of Chenab and Ravi, Cupressus torulosa, *Don.*
Devidiar of Panjab, Juniperus excelsa, *Bieb.*
Deya danga-gass, SINGH., Spathodea rheedii, *Sp.*
Deyngan, HIND., Cordia macleodii, *Hooker.*
Deyn gan, HIND.? of Jubbulpore, Hemigymnia macleodii, *Griff.*, Cordia macleodii.
Dhai? DUK., Sterculia colorata, *Roxb.*
Dhak, SANS., HIND., Butea frondosa, *Roxb.*
Dhak kino tree, ENG., Butea frondosa, *Roxb.*
Dhamin, HIND., MAHR., Butea gibsonii.
Dhamono, URIA, Grewia tiliæfolia, *Vahl.*, *W. Ic.*
Dhamman, PANJ., Grewia elastica, *Royle* and G. oppositifolia, *Buch.*
Dhamnoo, HIND., Grewia elastica, *Royle.*
Dhamnu, PANJAB, Grewia oppositifolia, *Buch.*
Dhanyali rajauri, syn. of Adelia serrata.
Dhao of Kangra, Conocarpus latifolia, *Roxb.*
Dhau, PANJABI, Lagerstrœmia parviflora, *Roxb.*
Dhaves, HIND., Dalbergia oojeinensis.
Dhawi, PANJ., Buxus sempervirens, *Linn.*
Dhengun, HIND., Cordia macleodii, *Hooker.*
Dhin daga, CAN., Pterocarpus marsupium, *Roxb*
Dhivus, MAHR., Dheuvus, HIND.
Dhobdo, URIA, Conocarpus latifolia, *Roxb.*
Dhol dak, HIND., Erythrina stricta, *Roxb.*
Dhoon siris, PANJABI, Albizzia elata.

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Dho[illegible] Hind., Shorea robusta, *Roxb*:
Dhoulee of Kumaon, Hymenodyction excelsum, *Wall*.
Dhoul papri in Kumaon, Ulmus integrifolia, *Roxb.*
Dhowa, Hind., Conocarpus latifolia, *Roxb.*
Dhoura, Hind. of Kumaon and Panjab, Lagerstrœmia parviflora, *Roxb. Fl. Ind.*, *W. Ic.*
Dhudi of Kumaon, Holarrhena antidysenterica, *Wall.*
Dhup of Kaghan, Juniperus excelsa, *Bieb.*
Dhyan, Hind., Cordia macleodii, *Hooker.*
Diar or Deodar, of Hazara, Kashmir and Kaghan, Cedrus deodara, *Loud.*
Dibi dibi, Eng., Cæsalpinia coriaria, *Willde.*
Dichrostachys cinera, *W. & A.*, syn. of Caillea cinerea.
Dielen, Ger., Deals.
Dikamalli, Hind., resin of Gardenia lucida, *Roxb.*
Dila of Shapu, Odina wodier, *Roxb.*
Dillenia elliptica, *Thunb.*, syn. of Dillenia speciosa, *Thunb.*
Dillenia indica, *Linn.*, syn. of Dillenia speciosa, *Thunb.*
Dimocarpus longan, *Lour.*, Nephelium longan, *Camb.*
Dimri, Házara, Cedrela toona, var. serrata, *Royle.*
Dinduga, Can., Dinduga tree, Anglo-Can.
Diospyros chinensis, *Bl.*, syn. of Diospyros kaki, *Linn.*
Diospyros discolor, *Willd.*, syn. of Diospyros mabola, *Roxb.*
Diospyros ebenaster, *Retz.*, syn. of Diospyros ebenum, *Linn.*
Diospyros embryopteris, Pers., syn. of Embryopteris glutinifera, *Roxb.*
Diospyros glutinosa, *Kon.*, syn. of Diospyros embryopteris, *Persoon.*
Diospyros glutinosa, *Kan.*, syn. of Embryopteris glutinifera, *Roxb.*
Diospyros hebenaster, *Rumph*, syn. of Diospyros ebenum, *Linn.*
Diospyros montana, *Wight Icon.*, syn. of Diospyros cordifolia, *Roxb.*
Diospyros tomentosa, *Cleghorn*, syn. of Diospyros lotus, L.
Dipterocarpus costatus, *Roxb.*, syn. of Dipterocarpus angustifolius, *W. & A.*
Dipterocarpus turbinatus, *Roxb.*, syn. of Dipterocarpus lævis, *Buch.*
Dirasana chettu, Tel., Albizzia lebbek, *Benth.*
Divi divi, Eng., Cæsalpinia coriaria, *Willde.*
Diya-na-gaha, Singh., Mesua speciosa, *Chois.*
Diya-siambala, Singh., Æschynomene aspera, *Linn.*
Dodar of Murree hills, Kaghan, &c., Pyrus kumaonensis.
Dodhan, Hind., Sapindus acuminatus, *Wallich.*
Dodhan, Panj., Sapindus detergens, *Roxb.*, *Royle.*
Dœler, Dan., Deals.
Dogwood, Eng., Cornus macrophylla, *Wall.*
Dok, Jav., Gomuto, Malay., Arenga saccharifera.
Dombakeena, Singh., Calophyllum moonii, *Wight.*
Dombe, Singh., Calophyllum inophyllum, *Linn.*
Dombeya excelsa, *Lamb.*, syn. of Araucaria excelsa, *R. Br.*
Doola kooda, Mahr., Nerium antidysentericum, *Linn.*
Doolb, Arab., Platanus orientalis, *Linn.*
Doon-gass, Singh., Doona zeylanica, *Thwaites.*
Dorana, Singh., Dipterocarpus glandulosus, *Thw.*
Dori, Lahore, Cedrela toona var. serrata, *Royle*
Doski, Rus., Deals.
Douk-ya mah, Burm., Dalechampia pomifera.
Douk-yat, Burm., Photinia serratifolia.
Doun-daloun, Burm., Indigofera, *Species.*
Drab, Hazara, Cedrela toona, var serrata, *Royle.*
Drab, Panj., Pinus longifolia, *Lamb.*, *Roxb.*
Dranguli, Jav., Cassia fistula, *Linn.*
Drawa, also Drawi of Hazara, Cedrela toona, var. serrata, *Royle.*
Drek of Panj., Albizzia odoratissima, *Benth.*
Drek, Hind. of Panjab, Melia azedarach, *Linn.*
Drek, Panjab, Pistacia integerrima, *H. F. & Th.*
Dryobalanops camphora, *Royle*, syn. of Shorea camphorifera, *Roxb.*
Dub, Rus., Oak.
Duca, Tel., Conocarpus latifolia, *Roxb.*
Duddaga, Tel., Guatteria cerasoides, *Duval.*
Dudduka, Tel., Guatteria cerasoides, *Duval.*
Dudhapar, Panjabi, Euonymus fimbriata, *Wall.*
Dudhia, Hind., Wrightia mollissima, *Wall.*
Dudhii-ki-lakri, Hind., Wrightia antidysenterica, *R. Br.* The bark.
Dudipa, Tel., Hymenodyction excelsum, *Wall.*
Dudippa (Godavery Forests), Tel., Hymenodyction, *Species.*
Dudla jamu of Sutlej, Prunus padus, *Linn.*
Dudla, Panj., Syringa emodi, *Wall.*
Dahai, Panjab, Grislea tomentosa, *Roxb.*
Duk, Jav., Arenga saccharifera, *Labill*, the hair.
Dul mara, Can., Chickrassia tabularis, *Ad. Juss.*
Dum-ul-akwain, Ar., Pterocarpus draco, *Linn.*
Dun of Kashmir, Juglans regia, *Linn.*
Duolo kunchun, Mahr., Bauhinia acuminata, *L.* Bauhinia albida.
Dupada chettu, Tel., Vateria indica, *Linn.*
Dupa maram, Can., Vateria indica, *Linn.*
Dup-salai, Hind., Boswellia thurifera, *Roxb.*
Durana, Affghan, Cratægus oxyacantha, *Linn.*
Durgari of Panjab, Albizzia stipulata, *Boiv.*
Duriya maddi, Tel., Briedelia spinosa, *Willde.*
Durshuna, Tel., Acacia sirissa, *Buch.*
Duni kaduru, Eng., Tabernæmontana dichotoma, *Roxb.*

E

Eagle wood tree, Eng., Aquilaria agallocha, *Roxb.*
Eajata, Can., Elate sylvestris, *Linn.*
East Indian myrrh, Eng., Commiphora madagascarensis, *Lindl. Fl. Med.*
Eatty maram, Tam., Dalbergia sissoides, *Grah.*
Ebben-hout, Dut., Ebony.
Ebene, Fr., Ebony.
Ebenholz, Ger., Ebony.
Ebeno, It., Ebony.
Ebenowoederewo, Rus., Ebony.
Ebenus, Lat., Diospyros ebenum, *Linn.* Ebony.
Εβενος, Gr., Diospyros ebenum, *Linn.*, *Retz.*
Ebony, Eng., Diospyros ebenum, *Linn.*, and Diospyros melanoxylon, *Roxb.*
Echites antidysenterica, *Roxb.*, syn. of Holarrhena antidysenterica, *Wall.*
Echites scholaris, *Linn.*, syn. of Alstonia scholaris, *R. Br.*
Echites venenata, *Roxb.*, syn. of Alstonia venenata, *R. Br.*
Eda-kula-ariti, Tel., Eda-kula-pala, Tel., Eda-kula-ponna, Tel., Eda-kula-nati, Tel., Alstonia scholaris, *R. Br.*
Edgeworthia falconerii, syn. of Reptonia buxifolia, *A. DC.*
Edible pine, Eng., Pinus gerardiana, *Wall.*
Eeg, Dan., Oak.
Ee petta ? Singh., Alangium lamarkii, *Thwaites.*
Eepetta, Singh., Cyathocalyx zeylanicus, *Champion, H. f. et T.*
Eeswara mamidi, Singh., Xanthochymus pictorius, *Roxb.*
Egisa, Tel., Pterocarpus marsupium, *Roxb.*
Egyptian thorn, Eng., Acacia vera, *Bauh.*
Ehretia pyrifolia, *D. Don.*, syn. of Ehretia serrata, *Roxb.*
Eiche, Ger., Oak
Eik, Duk., Oak.
Eilan, Panjab, Andromeda ovalifolia, *Don.*
Eimeo, Tahiti, Santalum album, *Linn.*, *Roxb.*
Ein-gyin, Burm., Shorea robusta, *Roxb.*
Eisenholz, Ger., Iron wood.
Eju, Malay, Arenga saccharifera.
Ek, Sw., Oak.
Elæocarpus aristatus, *Roxb.*, syn. of Monocera roxburghii, *Wight.*
Elæocarpus coriaceus, *Hook.*, syn. of Elæocarpus obovatus, *Ains.*
Elæocarpus copalliferus, *Retz.*, syn. of Vateria indica, *Linn.*
Elæocarpus rugosus, *Roxb.*, syn. of Monocera rugosa, *Wight.*
Elæodendron glaucum, *Wall.*, syn. of Elæodendron roxburghii, *W. & A.*
Ela (fragrant) mavi, Tel., Mangifera indica, *Linn.*
Elagokatu-gass, Singh., Xanthochymus ovalifolius, *Roxb.*
Ela-palol, Singh., Spathodea adenophylla, Singh.
Ela palol, Singh., Stereospermum chelonoides, *W. Ic.*, *DC.*
Elastic fig tree, Eng., Ficus elastica, *Roxb.*
Elava maram, Tam., Eriodendron anfractuosum, *DC.*
Elavum maram, Tam., Eriodendron anfractuosum, *DC.*
Ella midella, Singh., Barringtonia acutangula, *Gærtn.*
Elandei pallum, Tam., Zizyphus jujuba, *Willde.*
Elanji mara, Can., Zizyphus jujuba, *Willde.*
Elengi, Maleal, Mimusops elengi, *Linn.*, *Roxb.*
Elentha, Maleal, Zizyphus jujuba, *Willde*, *Lam.*
Elephant apple tree, Eng., Feronia elephantum, *Corr.*
Elephant thorn, Eng., Acacia tomentosa, *Willd.*
Ellendi maram, Tam., Zizyphus jujuba, *Willde.*
Elupa, Tam., Bassia longifolia, *Linn.*
Ellupi, Maleal, Bassia longifolia, *Linn.*
Emblica officinalis, *Gært.*, syn. of Phyllanthus emblica. *Linn.*
Emblic myrobalan, Eng., Emblica officinalis, *Gært.*
Embryopteris discolor, *G. Don.*, syn. of Diospyros mabola, *Roxb.*
Embryopteris glutinosa, *W. Ic.*, syn. of Diospyros embryopteris, *Persoon.*
Embroypteros kaki, *G. Don.*, syn. of Diospyros kaki. *Linn.*
Eng, Burm., Dipterocarpus grandiflora, *Wall.*
En-gyin, Burm., Hopea suava, *Wall.*
Entire-leaved Bread-fruit, Eng., Artocarpus integrifolia, *Linn.*
Ennai carrai maram, Tam., Bassia longifolia, *Linn.*
Epe, Tel., Hardwickia binata, *Roxb.*, ii., *W. & A.*
Epi, Tel., Bassia latifolia, *Roxb.*
Epicarpurus orientalis, *W. Ic.*, syn. of Trophis aspera, *Retz.*
Erabadoo-gass, Singh., Erythrina indica, *Lam.*
Eragu nowlee, Tel., Ulmus integrifolia, *Roxb.*
Erana, Panjab, Andromeda ovalifolia, *Don.*
Eraza, Arab, Cedar.
Erra bondala kobbari chettu, Tel., Cocos nucifera, *Linn.*
Erra chandanam, Tel., Pterocarpus santalinus, *L.*
Erra gadda, Tel., Diospyros montana, *Roxb.*
Erra lodduga, Tel., Symplocos racemosa, *Roxb.*
Erra pachchari, Tel., Dalbergia frondosa, *Roxb.*
Erez, Heb., Cedar.
Eri maddee, Tel., Terminalia arjuna, *W. & A.*
Erim pannah, Tam., Caryota urens, *Linn.*
Eriodendron orientale, *Stewd.*, syn. of Eriodendron anfractuosum, *DC.*
Erool of Malabar, Inga xylocarpa, *DC.*, *W. & A.*
Eroombala maram, Tam., Ferreola buxifolia, *Roxb.*
Erz, Arab, Cedar.
Eruputtu maram, Tam., Blackwood, Dalbergia latifolia, *Roxb.*
Eruvalu maram, Tam., Inga xylocarpa, *DC.*
Erythrina corallodendron, β. *Linn.*, syn. of Erythrina indica, *Lam.*
Erythrina maxima, *Roxb.* in E. I. C. Mus., syn. of Erythrina sublobata, *Roxb.*
Erythrinum monosperma, *Lam.*, syn. of Butea frondosa, *Roxb.*
Erythroxylon areolatum, *Ains.*, *Wight*, syn. of Sethia indica, *DC.*
Erythroxylon monogynum, *Roxb.*, syn. of Sethia indica, *DC.*
Erythroxylon sideroxyloides, *Roxb.*, syn. of Sethia indica, *DC.*
Esculapian rod, Eng., Bauhinia scandens, *Linn.*
Ethiopian sour gourd, Adansonia digitata, *Linn.*

Et[illegible]ye, Singh., Murraya, *Sp.*

Eugenia acutangula, *Linn.*, syn. of Barringtonia acutangula, *Gœrtn.*

Eugenia caryophyllifolia, *Lam.*, syn. of Eugenia jambolana *Lam.*

Eugenia jambolana, *Lam.*, syn. of Eugenia jambolana, *Lam.*

Eugenia jambolifera, *Roxb.* in E. I. C. Mus., syn. of Eugenia jambolana. *Lam.*

Eugenia jambosa aquea, *Wight Illustr.*, syn. of Jambosa aquea, *DC.*

Eugenia jambosa, E. cylindrica, *W. Ic.*, Jambosa cylindrica.

Eugenia jambosa, E. pauciflora, *Wight's Icones*, Jambosa cylindrica.

Eugenia læta, *Ham.*, Eugenia bracteata, *Roxb.*

Eugenia obtusifolia *Roxb. Fl.*, syn. of Eugenia jambolana, *Lam.*, *Roxb.*

Eugenia pimenta, *DC.*, var. ovâlifolia, syn. of Eugenia acris, *W. & A.*

Eugenia racemosa, *Linn.*, syn. of Barringtonia racemosa, *Roxb.*

Eugenia roxburghii, *DC.*, syn. of Eugenia bracteata, *Roxb.*, *W. & A.*

Eugenia sylvestris, *Moon's Cat.*, syn. of Jambosa aquea, *DC.*, *W. & A.*, *Roxb.*, *W. Ic.*

Eugenia zeylanica, *Roxb.*, syn. of Eugenia bracteata, *Roxb.*, *W. & A.*

Euphoria longana, *Lam.*, syn. of Nephelium longan, *Camb.*

Euterpe caribæa, *Spreng.*, syn. of Areca oleracea, *Linn.*

Evergreen bead tree, Eng., Melia sempervirens, *Roxb. Fl. Ind.*

Evergreen cypress, Eng., Cupressus sempervirens, *Willde.*

Evim-pannah, Tam., Caryota urens, *Linn.*

Evodia triphyila, *DC.*, syn. of Xanthoxylon triphyllum, *Juss.*, *Roxb.*

Exile tree, Eng., Thevetia neriifolia, *Juss.*

Eyn, Mahr., Terminalia tomentosa, *W. & A.*

Eyne, Hind. of Nagpore, Terminalia tomentosa, *W. & A.*

F

Fa-ang, Jap., Red wood of Japan.

Fagara budrunga, *Roxb.*, syn. of Xanthoxylon budrunga, *DC.*

Fagara rhetsa, *Roxb.*, syn. Xanthoxylon rhetsa, *R.*

Fagara triphylla, *Roxb.*, syn. of Xanthoxylon triphyllum, *Juss.*, *Roxb.*

Fahm-chobi, Ar., Charcoal.

Fals, falsh, palach, Kashmir, Populus ciliata, *Wall.*

Falconeria malabarica, *Wight*, syn. of Falconeria insignis, *Royle Ill.*

False mangosteen, Eng., Sandoricum indicum, *Cav.*

Falus mahi, Ar., Strychnos nux vomica, *Linn.*

Falwa, Hind., Bassia butyracea.

Fan palm, Eng., Corypha umbraculifera, *Linn.*

Fannas, Mahr., Fanas, Hind., Mahr., Artocarpus integrifolia, *Linn.*, Jackwood.

Faras, Panj., Tamarix orientalis, *L.*

Farri, Panjab, Grewia elastica, *Royle.*

Farwa Panj., Tamarix orientalis, *L.*

Fati-gadda Tel., Borassus flabelliformis, *Linn.*

Fen tree, Eng., Sethia indica, *DC.*

Fenjengisht, Ar., Vitex negundo, *Linn.*

Feronia pelucida, *Roth.*, syn. of Ægle marmelos, *Corr.*

Ferreola buxifolia, *Roxb.*, syn. Maba buxifolia, *Pers.*

Fetid sterculia, Eng., Sterculia fœtida, *Linn.*

Ficus ampelos, Burm., syn. Ficus asperrima, *Roxb.*

Ficus benghalensis, *Linn.*, syn. of Ficus indica, *R.*

Ficus cunia, *Buch.*, syn. of Ficus glomerata, *Roxb.*

Ficus macrophylla, *Roxb.*, syn. of Ficus roxburghii, *Wall.*

Ficus pohloria, *Moon*, Ficus asperrima, *Roxb.*

Ficus racemosa, *Willde.*, syn. of Ficus glomerata, *R.*

Filaof of Madagascar Casuarina equisitifolia.

Filicium decipiens, *Thw.*, syn. of Rhus decipiens, *Wight and Arn.*

Fir of Mehra and Hazara, Pinus longifolia.

Fir tree of the English in India, Casuarina equisitifolia and Casuarina muricata, *Roxb.*

Fish-bone tree of Europeans, Aralia crassifolia.

Fisouni, Panjab, Hamiltonia suaveolens, *Roxb.*

Flosreginæ, *Retz.*, syn. Lagerstrœmia reginæ, *Roxb.*

Fragrant acacia, Eng., Albizzia odoratissima, *Benth.*

Fras, Frast, of Cashmere, Populus alba, *Linn.*, also P. fastigiata, *Cleghorn*, also P. nigra, *Linn.*

Fraxinus moorcroftiana, *Wall.*, syn. of Fraxinus xanthoxylloides.

Fulsa, Hind., Grewia asiatica, *Linn.*

Funsi, Guz., Jackwood, Artocarpus integrifolia.

Furrud, Hind., Erythrina indica, *Lam.*

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Gab, Beng., Hind., Sans., Gab tree, Eng., Diospyros embryopteris, *Persoon*, Embryopteris glutinifera, *Roxb.*
Gada-kadooroo-gass, Singh., Strychnos nux vomica, *Linn.*
Gadkuji of Ravi, Pyrus variolosa, *Wall.*
Gæta-nitul, Singh., Trophis aspera, *Retz.*
Gahru, Malay, Aquilaria agallocha, *Roxb.*
Gaja chinni, Tel., Celastrus montana, *Roxb.*
Galboja of Chira, Pinus gerardiana, *Wall.*
Galedupa indica, *Lam.*, syn. Pongamia glabra, *Vent.*
Galgoja of Pangi, Pinus gerardiana, *Wall.*
Gal mendora, Singh., Cynometra ramiflora, *Linn.*
Gal mora, Singh., Cryptocarya wightiana, *Thw.*
Gal-mora-gaha, Singh., Pygeum ceylanicum, *Gœrt.* also P. wightianum, *Blume.*
Gal morre, Singh., Nephelium, *Species*
Galsyambala-gas, Singh., Dialium ovoideum, *Thw.*
Galla, also gallaiw, of Sutlej, Cupressus torulosa, *Don.*
Gallis gas, Singh., Gardenia latifolia, *Ait.*
Galls, see Prosopis spicigera, *Linn.*, *W. & A.*
Gambier Malay, Uncaria gambier, *Hunt.*, *Roxb.*
Gambogia gutta, *Linn.*, syn. of Hebradendron gambogioides.
Gam-gudu, Tel., Casearia tomentosa, *Roxb.*
Gam-malu-gaha, Singh., Pterocarpus marsupium, *Roxb.*
Ganara kurra, Tel., Ganara wood.
Ganda baroza, Boswellia thurifera, *Roxb.*
Gandaga mara, Can., Santalum album, *Linn.*
Gandehra of Kulu, Nerium odoratum, *Lam.*
Gandla of Kanawar, Bergera konigii, *Linn.*
Gandhul, Hind., Ixora parviflora, *Vahl.*
Gand'hu p'hali, Tel., Michelia champaca, *Linn.*
Gangaravi, Tel., Thespesia populnea, *Lam.*
Ganga regu, Tel., Zizyphus jujuba, *Willde.*
Ganger, Panj., Sageretia brandrethiana.
Ganger of Salt Range, Grewia betulæfolia, *Juss.*
Gangi of Salt Range, Grewia betulæfolia, *Juss.*
Ganitrus sphæricus, *Gærtn.*, syn. of Elæocarpus granitrus, *Roxb.*
Gan-mee, Singh., Dasyaulus neriifolia, *Thw.*
Gantha karra, Tel., Ghantha wood, Anglo-Tel.
Gara chettu, Tel., Balanites ægyptiaca, *Delile.*
Garaga, Tel.; Gardenia gummifera, *Linn.*
Garandu of Murree, Prinsepia utilis, *Royle.*
Garar of Salt Range, Reptonia buxifolia, *A.*, *DC.*
Garcinia affinis, *W. & A.*, syn. of Garcinia roxburghii, *R. W.*
Garcinia cambogia, *Roxb.*, not *Desr.*, syn. of Garcinia roxburghii, *R. W.*
Garcinia cowa, *Roxb.*, syn. of Garcinia roxburghii, *R. W.*
Garcinia indica, *Choisy*, syn. of Garcinia cambogia, *Desrous.*
Garcinia kydia, *W. & A.*? syn. of Garcinia cambogia, *Desrous.*
Garcinia purpurea, Wild mangosteen, Moorgul mara.
Garcinia zeylanica, *Roxb.*, syn. of Garcinia roxburghii, *R. W.*
Gardala of Kanawar, Bergera konigii, *Linn.*
Gardenia arborea, *Roxb.*, syn. of Gardenia gummifera, *Linn.*
Gardenia costata, *Roxb.*, syn. of Gardenia coronaria, *Buch.*
Gardenia dumetorum, *Retz.*, syn. of Randia dumetorum, *Lam.*
Gardenia latifolia, *Roxb.*, syn. of Gardenia enneandra, *Kon.*
Gardenia longispina, *Roxb.*, syn. of Randia longispina, *DC.*
Gardenia multiflora, *Bl.*, syn. of Randia longiflora, *Lam.*
Gardenia resinifera, *Roth.*, syn. of Gardenia lucida, *Roxb.*
Gardenia spinosa, *Linn.*, syn. of Randia dumetorum, *Lam.*
Gargusa, Panjab, Acacia jacquemonti, *Bentham.*
Gari chettu, Tel., Balanites ægyptiaca, *Delile.*
Garlic pear, Eng., Cratæva roxburghii, *R. Br.*
Garœla, Singh., Butea frondosa, *Roxb.*, *W. & A.*
Garu, Panj., Arundinaria falcata.
Garu, Malay, Eagle wood.
Garuga chettu, Tel., Garuga pinnata, *Roxb.*
Gas-nawahandi, Singh., Euphorbia tiraculli, *Linn.*
Gass, Singh., Tree.
Gatte chettu, Tel., Zizyphus xylopyrus, *Willd.*
Gedde killala-gass, Singh., Sonneratia acida, *Willde.*
Geh of Sutlej, Corylus colurna, *Linn.*
Gehai or gawai, or rul of Sutlej valley, Eleagnus conferta.
Gehela, Mahr., Randia dumetorum, *Lam.*
Genet epineux, Fr., Parkinsonia aculeata, *Linn.*
Gengaru, Panj., Cratægus crenulata, *Roxb.*
Gen-wa, Beng., Excœcaria agallocha, *Linn.*
Geri-œta, Singh., Chionanthus zelyanica, *Willd.*
Ghan seng, Can., Bignonia xylocarpa, *Roxb.*
Ghanta, Beng., Stereospermum suaveolens, *W. Ic.*
Ghantee, Hind., Bœhmeria nervosa.
Ghat palm, Eng., Caryota urens, *Linn.*
Ghaz, Pashtu, Tamarix orientalis, *L.*
Ghazlai, Panj., Tamarix dioica, *Roxb.*, also T. gallica, *Linn.*
Ghebu nelli, Tel., Premna integrifolia, *Roxb.*
Ghera, Can., Gheru mara, Can., Semecarpus anacardium, *Linn.*
Ghidayan ? Can., Tree.
Ghont, Hind., Zizyphus xylopyrus, *Willd.*
Ghoot, Burm., Diospyros, *Species.*
Ghooteky, Sans., Gmelina arborea, *Roxb.*
Ghujbai also gira, Pashtu. Alnus nepalensisis.
Ghundasaru, Duk., Santalum album, *Linn.*
Ghunia, Tel., Salvadora persica, *Linn.*
Ghuntiah koosoomoo, Uria., Schleichera trijuga, *Willd.*
Ghuraskai, Pashtu, Dodonæa burmanniana, *DC.*
Ghurghustai, Pashtu, Amygdalus persica.
Ghuzbe, Chenab, Alnus, *Sp.*
Ghwa, Pashtu, Tamarix orientalis, *L.*
Ghwanza, Panj., Cratægus oxyacantha, *Linn.*
Gi-change Tel., Celastrus montana, *Roxb.*
Gigantic swallow wort, Eng., Calotropis gigantea, *R. Br.*
Gilas, Hind., Cerasus vulgaris, Mill.

Gira, Chenab, Alnus, *Sp.*
Gird-[illegible] of Dera Ghazi Khan, Cassia fistula.
Gir[illegible], Panjab, Fluggea virosa, *Roxb.*
Giri karnika, Sans., Tel., Alhagi maurorum, *Tournc.*
Girimallika, Tel., Wrightia antidysenterica, *R. Br.*
Girnar, Hind., Dillenia speciosa, *Thunb.*
Girthan, Hind., Fluggea virosa, *Roxb.*
Girtin, Sageretia oppositifolia, *Brogn.*
Glomerous fig tree, Eng., Ficus glomerata, *Roxb.*
Glossospermum velutinum, *Wall.*, syn. of Visenia velutina, *W. Ic.*
Gluga, Jav., Broussonetia papyrifera, *Vent.*
Gmelina rheedii, *Hooker*, syn. of Gmelina arborea, *Roxb.*
Gnidia eriocephala, *Wight*, *Gardner.*
Gnoo-gyee, Burm., Cassia, *Species.*
Gnoo-shwoay-ngu-bin, Burm., Cassia fistula, *L.*
Gobrea, Hind., Pinus webbiana, *Wall. and Linn.*
Goda danga, Singh., Stereospermum chelonoides, *W. Ic.*
Goda-itta, Singh., Hedera exaltata, *Thw.*
Goda-kakaru, Singh., Strychnos nux vomica, *Linn.*
Goda-maranda, Singh., Acmena zeylanica.
Goda para, Singh., also Dillenia retusa, *Thunb.* and Dillenia dentata ? ?
God-gadala, Sterculia rœxburghii.
Googul, Hind., Googula, Singh., Googooloo, Tel., Commiphora madagascarensis, *Lindl. Fl. Med.*
Googgul, Beng., Balsamodendron agallocha, *W. & A.*
Gohinla, Panjab, Hamiltonia suaveolens, *Roxb.*
Goia pandu, Tel., Psidium pyriferum, *Linn.*, *Roxb.*
Gokatu, Singh., Hebradendron gambogioides.
Gold Mohur tree, Eng., Poinciana regia.
Goldar, Duk., Sterculia guttata, *Roxb.*
Gooler, Hind., Ficus glomerata, *Roxb.*
Golu mora gass, Singh., Cryptocarya wightiana, *Th.*
Gombharee, Uria, Gmelina, *Species.*
Gombhari ? Sans., Gmelina arborea, *Roxb.*
Gomphia malabarica, *DC.*, syn. of Gomphia angustifolia, *Vahl.*
Gomphia zeylanica, *DC.*, syn. of Gomphia angustifolia, *Vahl.*
Gomuti, Jav., Gomuto, Malay, Arenga saccharifera, *Labill.*
Goomer tek, Tel., Gmelina arborea, *Roxb.*
Goompana chettu, Tel., Odina wodier, *Roxb.*
Gona-gass, Singh., Diospyros insignis, *Thw.*
Gondi, Hind., Cordia angustifolia, *Roxb.*, also C. rothii, *Ræm. & Sch.*
Gondni, Duk., Cordia obliqua, *Willd.*
Gon-kadura, Singh., Cerbera odallam, *Gært.*
Goonnicho, Tel., Nerium odoratum, *Lam.*
Goonjun mara, Can., Briedelia montana.
Gooya babula, Beng., Vachellia farnesiana, *W. & A.*
Goragamudi, Tel., Eugenia bracteata, *Roxb.*
Gorakah-gass, Singh., Garcinia cambogia, *Desrous.*
Gorrukeenee, Singh., Calophyllum calaba, *Linn.*
Gossampinus rubra, *Ham.*, syn. of Bombax malabaricum, *DC.*
Gossampinus rumphii, *Sch. & End.*, syn. of Eriodendron anfractuosum, *DC.*
Gotte, Tel., Gotte chettu, Tel., Zizyphus xylopyrus, *Willd.*
Gouharea, Tel., Uria, Acacia, *Species.*
Goundhan, Mahr., Diospyros cordifolia, *Roxb.*
Grewia arborea, *Roxb.*, syn. Grewia tiliæfolia, *Vahl.*
Grewia variabilis, *Wall.*, syn. of Grewia tiliæfolia, *Vahl.*
Gua, Beng., Areca catechu, *Linn.*
Guarea binectarifera, *Roxb.*, syn. of Dysoxylon macrocarpum, *Blume.*
Guas, Idaan of Borneo, Tree.
Guava, Eng., Psidium pyriferum, *Linn.*
Guava pyriformis, *Gærtn.*, syn. of Psidium pyriferum, *Linn.*
Guazuma ulmifolia, *Wall.*, syn. of Guazuma tomentosum, *H. B.*
Guch of Panjab, Coriaria nepalensis.
Gud-bhyns of Kumaon, Salix tetrasperma, *Roxb.*
Gudira pusjun yennai, Tam., Sterculia fœtida, *L.*
Gugala, Tel., Shorea robusta, *Roxb.*
Gugalapu chettu, Tel., Boswellia glabra, *Roxb.*
Gugalu, Tel., Shorea robusta, *Roxb.*
Gugu, Panjab, Chenab, Ravi, Pavia indica, *Royle.*
Guggalam chettu, Tel., Shorea robusta, *Roxb.*
Guggilapu chettu, Tel., Boswellia glabra, *Roxb.*
Gujju (dwarf,) mamidi, Tel., Mangifera indica, *L.*
Gujju narikedam, Tel., Cocos nucifera, *Linn.*
Gulab jam, Beng., Gulabi jam, Duk., Gulab-jamun, Pers., Eugenia jambos, *Linn.*
Guldar, Panj., Cedrela toona, var. serrata, *Royle.*
Guli, Tel., Capparis grandis, *Linn.*
Guly maram, Can., Zizyphus jujuba, *Willde.*
Gullem chettu, Tel., Capparis grandis, *Linn.*
Gumar, Beng., Hind., Gmelina arborea, *Roxb.*
Gum arabic Tree, Eng., Acacia vera, *Bauh.*
Gum anime tree, Eng., Hymenæa courbaril, *Linn.*
Gumbari, Beng., Gmelina arborea, *Roxb.*
Gum benjamin, Eng., Styrax benzoin, *Dryander.*
Gumber, Beng., Gmelina arborea, *Roxb.*
Gummudi chettu, Tel., Gmelina arborea, *Roxb.*
Gumudi maram, Tam., Gmelina arborea, *Roxb.*
Gumudu-teku, Tel., Gmelina arborea, *Roxb.*
Gumhar, Punj., Gmelina arborea, *Roxb. Cor.*
Gumun mara, Can., Zizyphus xylopyrus, *Willd.*
Gun, Panjab, Chenab, Ravi, Pavia indica, *Royle.*
Gund, Hind., Cordia angustifolia, *Roxb.*
Gundee, Beng., Xanthophyllum virens, *Roxb.*
Gundhal rungun, Beng., Ixora parviflora, *Vahl.*
Gundni, Hind., Cordia angustifolia, *Roxb.*
Gundun, Mahr., Ehretia ovalifolia, *Wight's Ic.*
Gungau, Burm., Mesua ferrea, *Linn.*, *DC.*
Gurdalu also cherkush of Kangra, and Kanawar, Prunus armeniaca.
Gurgara of Salt Range, Reptonia buxifolia, *A. DC.*
Gurgu, Panjab, Pistacia integerrima, *H. f. & Th.*
Gurgura, Panjabi, of Salt Range, Reptonia buxifolia, *A. DC.*
Gurinda of Murree, Prinsepia utilis, *Royle.*
Gurmala, Mahr., Gurmalla, Guz., Gurmulla, Hind., Cassia fistula, *Linn.*
Gurrapu badam chettu, Tel., Sterculia fœtida, *Linn.*
Guti, Mahr., Zizyphus xylopyrus, *Willd.*
Guvaka, Sans., Areca catechu, *Linn.*
Guva-babula, Beng., Hind., Vachellia farnesiana, *W. & A.*, syn. of Acacia farnesiana, *Willd.*
Gwai-douk, Burm., Connarus speciosa.
Gwalidar, Panjab, Diospyros lotus, *L.*
Gwalteria laurifolia, *Graham*, syn. of Sageræa laurina, *Dalz.*
Gwara also cherai, Quercus ilex, *Linn.*
Gynaion vestitum, *DC.*, syn. of Cordia vestita, *H. f. et T.*
Gyo, Burm., Schleichera trijuga, *Willd.*
Gyoo tha, Burm., Melicocca trijuga.
Gyrocarpus americanus, *Grah.*, and Gyrocarpus asiaticus, *Willde*, syns., of Gyrocarpus jacquini, *Roxb.*

H

Haddu, Panj., Cornus macrophylla, *Wall.*
Hagin kae mara, Can., Nauclea, *Species.*
Hagin mara, Can., Nauclea ? ? *Species.*
Hairy Bread-fruit tree, Artocarpus hirsuta, *Lam.*
Hal, Singh., Vateria indica, *Linn.*
Halamba-gass, Singh., Nauclea cadamba, *Wall.*
Halee dasul, Can., Lagerstrœmia reginæ, *Roxb.*
Haleo, Panj., Cornus macrophylla, *Wall.*
Hal-gass, Singh., Hal gaha, Singh., Vateria indica, *Linn.*
Hal mendora, Singh., Cynometra ramiflora, *Linn.*
Hali maram, Can., Chrysophyllum roxburghii, *G. Don.*
Hameniel, Singh., Berrya ammonilla, *Roxb.*
Halmililla, Singh., Berrya ammonilla, *Roxb.*
Hampalanda-gass, Singh., Terminalia parviflora, *Thw.*
Ham-parandella-gass, Singh., Rottlera tinctoria, *Roxb., Cor. Pl.*
Hamu, Panjab, Fraxinus floribundus, *Wall,*
Hanchu, Panjabi, Euonymus fimbriata, *Wall.*
Hane of Kangra, Pavia indica, *Royle, Il. Him. Bot.*
Hanee? mara, Can., Pterocarpus dalbergioides, *Roxb.*
Hamde also padara, of Ravi, Coriaria nepalensis.
Hanja, Pushtu, Acacia farnesiana, *Willd.*
Hanudan of Kangra, Chenab and Ravi, Pavia indica, *Royle, Ill. Him. Bot.*
Hanuz, Panjab, Fraxinus xanthoxylloides.
Har, Hind., Hara, Hind., Terminalia chebula, *Retz.*
Harang of Pangi, Juniperus squamosa.
Hari also harion of Jhelum and Hazara, Armeniaca vulgaris.
Haritaka, Sans., Terminalia chebula, *Retz.*
Hari tuki, Beng., Terminalia chebula, *Retz.*
Harin, Panj., Cornus macrophylla, *Wall.*
Harnaulli of Salt Range, Ricinus communis, *Linn.*
Harri, Hind., Nyctanthes arbor-tristis., *Linn.*
Harrin-kha-a? Hind., Amoora rohituka.
Harru, Panj., Cornus macrophylla, *Wall.*
Hasur gunni, Can., Dalbergia paniculata, *Roxb.*
Hattian, Hind., Eriodendron anfractuosum, *DC.*
Haud and Ud of Garcias, Eagle wood.
Hawthorn, Eng., Cratægus oxyacantha, *Linn.*
Heari, Mahr., Terminalia chebula, *Retz.*
Heart-leaved fig tree, Eng., Ficus cordifolia.
Heavy oak, Eng., Quercus incana.
Hebolsu, Mahr., Artocarpus hirsuta, *Lam.*
Hebradendron cambojioides, *Graham*, syn. of Garcinia gutta, *R. W.*

Hedde, Can., Nauclea cordifolia, *Roxb.*
Hedde woke, Singh., Choecarpus pungens.
Hedoo, Mahr., Nauclea cordifolia, *Roxb.*
Hedoo mara, Can., Nauclea parvifolia, *Roxb.*
Hedysarum alhagi, *Linn.*, syn. of Alhagi maurorum, *Tourne.*
Hedysarum lagenarium, *Roxb.*, syn. of Æschynomene aspera, *Linn.*
Heenkadol Singh., Ægiceras fragrans, *Kon.*
Heerda, Mahr., Terminalia chebula, *Retz.*
Helbulsoo, Can., Artocarpus hirsuta, *Lam.*
Huldoo, Panjab, Nauclea cordifolia, *Roxb.*
Helembe, Singh., Nauclea parvifolia, *Roxb.*
Helij-i-kabuli, Ar., Terminalia chebula, *Retz.*
Helileh-i-kalan, Pers., Terminalia chebula, *Retz.*
Hemangamu, Tel., Michelia champaca, *Linn.*
Heman pushpakamu, Tel., Michelia champaca, *Linn.*
Hembar, Panjab, Ulmus campestris, *L.*
Hemigymma MacLeodii, syn. of Cordia macleodii, *Hooker.*
Henna, Pers., Lawsonia alba, *Linn., W. & A.*
Henna gorivi, Can., Ixora parviflora, *Vahl.*
He Oak of Australia, Casuarina equisitifolia.
Heritiera fomes, *Willde*, syn. of H. minor, *Lam.*
Hernandia guianensis, *Aub.*, syn. of H. sonora, *L.*
Heterophragma roxburghii, *DC.*, syn. of Bignonia quadrilocularis, *Roxb.*
Hez'm, Pers. Timber.
Hia-hi, Sandwich Islands, Santalum album, *Linn.*
Hibiscus populneus, *Roxb.*, syn. of Thespesia populnea, *Lam.*

Hibiscus tiliaceus, syn. of Paritium tiliaceum, *Ad. Juss.*
Hibiscus tortuosus, syn. of Paritium tiliaceum, *Ad. Juss.*
Hig-gass, Singh., Odina wodier, *Roxb.*
Hijjul, Hind., Beng., Barringtonia acutangula, *Gærtn.*
Hijli badam, Hind., Aleurites triloba, *Forst.*
Hijli badam, Beng., Hijili badam, Hind., Anacardium occidentale, *Linn.*
Hik-gas, Singh., Odina wodier, *Roxb.*
Hill-bamboo, Eng., Arundinaria utilis.
Hill cocoanut, Eng., Sterculia foliis digitatis, *Ains.*
Hill ebony, Eng., Diospyros lanceolata.
Himalayan alder, syn. of Alnus nepalensis.
Himalayan cedar, Cedrus deodara, *Loud.*
Himalayan chesnut, Eng., Pavia indica, *Royle.*
Himalayan fir, Eng., Picea webbiana, *Lamb.*
Himalayan hornbeam, Eng., Carpinus viminea.
Himalayan ilex, Eng., Quercus incana.
Himalayan spruce, syn. of Abies smithiana, *Wall.*
Himbro of Kanawar, Ulmus erosa, and Ulmus pumila, *Pall.*

Hingg, Panj., Balanites ægyptiaca, *Delile.*
Hinghudie, Sans., Terminalia catappa, *Linn.*
Hingon, Beng., Balanites ægyptiaca, *Delile.*
Hingor, Panj., Balanites ægyptiaca, *Delile.*
Hingot, Panj., Balanites ægyptiaca, *Delile.*
Hingun bet, Duk., Balanites ægyptiaca, *Delile.*
Hinjolo, Uria, Eugenia acutangula.
Hip-pe, Can., Honge, Can.
Hirda, Duk., Terminalia chebula, *Retz.*
Hiri-koddol, Singh., Rhizophora, *Species.*
Hirida, Mahr., Nauclea ? ? *Species.*
H'nan bai, Burm., Odina wodier, *Roxb.*
H'nau, Burm., Nauclea cordifolia, *Roxb.*
Hodung, Panj., Populus euphratica, *Oliv.*
Hœdoka, Singh., Chætocarpus coriaceus, *Thw.*
Hog-plum tree, Eng., Spondias mangifera, Pers.
Holondho of Ganjam and Goomsur, Nauclea cordifolia, *Roxb.*
Holoptelœa integrifolia, *Planch*, syn of Ulmus integrifolia, *Roxb.*
Hombu of Kanawar, Myricaria ? *Sp.*
Homedereya-gass, Singh., Diospyros candolleana, *Wight.*
Homœderiye, Singh., Heritiera littoralis, *Ait.*

CSL

Honda-para, SINGH., Dillenia speciosa, *Thunb.*
Hone, CAN., Pterocarpus marsupium, *Roxb.*
Honey tree, ENG., Schleichera trijuga, *Willde.*
Honnay, CAN., Pterocarpus santalinus, *Linn.*
Hoom, MAHR., Guatteria cerasoides, *Duval.*
Hoom, MAHR., Uvaria, *Species.*
Hoongay, CAN., Pongamia glabra, *Vent.*
Hoonsay, CAN., Tamarindus indica, *Linn.*, *Roxb.*
Hoora, MAHR., Symplocos racemosa, *Roxb. Fl.*
Hoorakandoo, SINGH., Kurrimia ceylanica, *Arn.*
Hopea odorata, *Thingan*, BURM.
Hora-gass, SINGH., Dipterocarpus zeylanicus, *Thw.*
Hordah, GOND., Terminalia chebula, *Retz.*
Horned cherry, ENG., Prunus padus, *Linn.*
Horocka tree of New Zealand, syn. of Aralia crassifolia.
Horre, SINGH., Dipterocarpus lævis, *Buch.*
Horse almond tree, ENG., Sterculia fœtida, *Linn.*
Horse cassia, ENG., Cathartocarpus javanicus.
Horse chesnut, ENG., Pavia indica, *Royle Ill.*
Hpa-lan, BURM., Bauhinia racemosa, *Lam.*
Hsai than bayah, BURM., Gelonium bifarium, *Roxb.*
Hseik-kyi, BURM., Sapindus rubiginosus, *Roxb.*
H'tein, BURM., Nauclea parvifolia *Roxb.*, *Willde.*
Hteingalah, BURM., Nauclea elliptica, *Dalzell.*
Hteinthay, BURM., Nauclea ? ? *Species.*
Htouk-gyau, BURM., Terminalia macrocarpa, *Brandis.*
H'touk sha, BURM., Vitex arborea, *Roxb.*
Hulanhick, SINGH., Melia, *Species.*
Hulam hick-gaha, SINGH., Chickrassia tabularis, *Ad. Juss.*
Hulan-mara, SINGH., Albizzia stipulata, *Boiv.*
Huldah, DUK., Terminalia chebula, *Retz.*
Huli shena, CAN., Tamarindus indica, *Linn.*
Hum, PANJAB, Fraxinus floribundus, *Wall.*
Hunkara, SANS., Capparis horrida, *Linn.*, *W. & A.*
Hunu-kirille, SINGH., Grewia paniculata, *Roxb.*
Hurdoo ? HIND., Nauclea cordifolia, *Roxb.*
Huri, HIND., Casuarina muricata, *Roxb.*
Huri tuki, BENG., Terminalia citrina, *Roxb.*
Hurin-hura, HIND., Amoora rohituka, *W. & A.*
Hurku of Kanawar, Rhus acuminata, *DC.*
Hurr of Kumaon, Terminalia chebula, *Retz.*
Hursing, CAN., Nyctanthes arbor-tristis, *Linn.*
Hursinghar, HIND., Nyctanthes arbor-tristis, *L.*
Husse luban, PERS., Styrax benzoin, *Dryander.*
Husse-ul-jawi, ARAB, Styrax benzoin, *Dryander.*
Huziz-hindi, AR., Berberis lycium, *Royle.*
Hydnocarpus venenata, *Gærtn.*, syn. of Hydnocarpus inebrians, *Vahl.*
Hyi-bin, BURM., Zizyphus jujuba, *Willde.*, *Lam.*
Hypericum carneum, *Wall. Cat.*, syn. of Ancistrolobus carneus, *Wall.*
Hyrah of Kumaon, Terminalia chebula, *Retz.*

I

Iddu mulle, Tam. of Ceylon, Pyrularia wallichiana, *A. D.*
Ignatia amara, syn. of Strychnos sancti ignatii.
Iju, Ejoo or Eju, JAV., Arenga saccharifera, *Labill.* The Hair.
Ilex japonica, *Thunb.*, syn. of Berberis nepalensis, *Spr.*
Illana, Tam. of Ceylon, Zizyphus jujuba, *Willde.*
Illinda, TEL., Diospyros chloroxylon, *Roxb.*
Illumbilli maram, TAM., Ferreola buxifolia, *Roxb.*
Illupa, TAM., Bassia latifolia, *Roxb.*, also Bassia longifolia, *Linn.*
Imbir, PANJAB, Ulmus campestris, *Linn.*
Imbool-gass, SINGH., Eriodendron anfractuosum, *DC.*
Imli, HIND., Tamarindus indica, *Linn.*
Incense wood, ENG., Eagle wood.
Indak of Salt Range, syn. of Gynaion vestitum, *DC.*
Indapa chettu, TEL., Strychnos potatorum, *L.*
Inderjao, also Inderjau, HIND., Wrightia antidysenterica, *R. Br.*, Holarrhena antidysenterica, *Wall.*
Indian almond tree, ENG., Terminalia catappa, *Linn.*
Indian blackwood, ENG., Blackwood.
Indian butter tree, ENG., Bassia butyracea.
Indian cedar, ENG., Cedrus deodara, *Loud.*
Indian chesnut, ENG., Pavia indica, *Royle Ill.*
Indian copal tree, ENG., Vateria indica, *Linn.*
Indian coral tree, ENG., Erythrina indica, *Lam.*
Indian elm, ENG., Ulmus integrifolia, *Roxb.*
Indian fig tree, ENG., Ficus indica, *Linn.*, *Roxb.*
Indian gum arabic tree, ENG., Acacia arabica, *Willd.*, *W. & A.*
Indianischer rohr, GER., Bambusa.
Indian jack tree, ENG., Artocarpus integrifolia, *Linn.*
Indian laburnum, ENG., Cassia fistula, *Linn.*
Indian mountain ash, syn. of Cotoneaster bacillaris, *Vern.*
Indian mulberry, ENG., Morinda citrifolia, *Linn.*
Indian nettle tree, ENG., Sponia orientalis, *Voigt.*
Indian olive, ENG., Olea dioica, *Roxb.*
Indian prenet, ENG., Vitex trifolia, *Linn.*
Indian rubber tree, ENG., Ficus elastica, *Roxb.*
Indian sandalwood, ENG., Sandoricum indicum, *Cav.*
Indian silver fir, ENG., Pinus smithiana, *Wall.*
Indrayava, SANS., Wrightia antidysenterica, *R. Br.*
Indrajow, GUZ., Wrightia antidysenterica, *R. Br.*, the bark.
Induga wood ? ANGLO-TEL., Strychnos potatorum, *L.*, *Willde.*
Induga karra, TEL., Strychnos potatorum, *L.*
Indupu chettu, TEL., Strychnos potatorum, *L.*
Ind yeru, MAHR., Andgeri, CAN.
Indzar, PUSHT., Grewia betulæfolia, *Juss.*, also Ficus caricoides.
Inghurdi, SANS., Amygdalus communis, *Linn.*
Ingini gaha, SINGH., Strychnos potatorum, *L.*
Ingudi, SANS., Terminalia catappa, *Linn.*, *Roxb.*
Injini-gass, SINGH., Strychnos potatorum, *L.*
Inzarre, PUSHT., Grewia betulæfolia, *Juss.*
Ipei, TAM., Bassia latifolia, *Roxb.*
Ipo toxicaria, *Persoon*, syn. of Antiaris toxicaria, *Leschen*, also Upas antiar.
Ippa, TEL., Ippa manu, TEL., Bassia latifolia, *Roxb.*, also Bassia longifolia, *Linn.*
Ippe chettu, Bassia latifolia, *Roxb.*
Irak, PERS., Salvadora indica, *Royle.*
Ir-elli-palai, TAM., Alstonia scholaris, *R. Br.*
Iri babool, MAHR., Vachellia farnesiana, *W. & A.*
Iriki, TEL., Cordia myxa, *Linn.*
Irin, PUSHTU, Quercus incana.
Irindi, HIND., Ricinus communis, *Linn.*

GSL

Iripa, MALEAL, Cynometra ramiflora, *Linn.*
Irkumbalitha mara, CAN., Bauhinia variegata, *L.*
Iron wood of Arracan and Pegu, ENG., Inga xylocarpa, *DC.*, Inga bigemina, *Willde.*
Iron wood of Ceylon, ENG., Mesua ferrea, *Linn.*, also Mimusops indica, *Roxb.*
Iron wood, ENG., Maba buxifolia, PERS.
Iron wood of the South Sea Islands, Casuarina equisitifolia.
Irri of Lahoul, Quercus ilex, *Linn.*
Irugudu chettu, TEL., Black wood, ENG.
Irumbeli, TAM., Maba buxifolia, PERS.
Isakarasi manu, TEL., Sapindus rubiginosus, *Roxb*
Ishi-rashi, TEL., Sapindus rubiginosus, *Roxb.*
Isonandra cullenii, Drury, syn. of Bassia elliptica, *Dalzell.*
Iswara mamadi, TEL., Xanthochymus pictorius, *Roxb.*
Ita chettu, TEL., Elate sylvestris, *Linn.*
Itcham maram, TAM., Elate sylvestris, *Linn.*
Iti, MALEAL, TAM., Dalbergia latifolia, *Roxb.*
Itti alu, MALEAL, Ficus benjamina, *Linn.*
Ixora alba, *Roxb.*, syn. of Ixora parviflora, *Vahl.*
Ixora decipiens, *DC.*, syn. of Ixora parviflora, *Vahl.*
Ixora paniculata, LAN., syn. Pavetta indica, *Linn.*
Ixora pavetta, ANDR., syn. of Ixora parviflora, *Vahl.*
Ixora pavetta, *Roxb.*, syn. of Pavetta indica, *Linn.*
Izaraki ? PERS., Strychnos nux vomica, *Linn.*

J

Jack in the box, ENG., Hernandia sonora, *Linn.*
Jack tree, ENG., Artocarpus integrifolia, *Linn.*
Jaggery of cocoanut toddy, Cocos nucifera, *Linn.*, of palmyra, Borassus flabelliformis, *Linn.*, of date tree, Phœnix sylvestris.
Jagguri, CAN., MAHR., Antiaris innoxia, *Blume.*
Jaianti, BENG., Sesbania ægyptiaca, *Pers.*
Jal, also Jhal, HIND., Salvadora indica, *Royle*, also S. oleoides, *Dcne.*
Jala nergundi, SANS., Vitex trifolia, *Linn.*
Jalari, CAN., TEL., Vatica laccifera, *W. & A.*
Jald-aru, Chuli ; SUTLEJ, Prunus armeniaca.
Jalidar of Salt Range, Cotoneaster obtusa, *Wall.*
Jali mara, CAN., Vachellia farnesiana, *W. & A.*
Jalin ? CAN., Shorea laccifera, *Heyne.*
Jam, DUK., MALEAL., Eugenia jambos, *Linn.*
Jam, HIND., Psidium pomiferum, *Linn.*, and P. pyriferum, *Linn.*, *Roxb.*
Jama chettu, TEL., Psidium pyriferum, *Linn.*
Jamb, HIND., Eugenia jambos, *Linn.*
Jamba, MAHR., CAN., Inga xylocarpa, *DC.*
Jambay, CAN., Inga xylocarpa, *DC.*, *W. & A.*
Jambo, SINGH., Eugenia jambos, *Linn.*
Jambo, BENG., Jambosa aquea, *DC.*, *W. & A.*
Jambosa domestica, *DC.*, syn. of Eugenia malaccensis, *Linn.*
Jambosa malaccensis, *DC.*, syn. of Eugenia malaccensis, *Linn.*
Jambosa purpurascens, *DC.*, syn. of Eugenia malaccensis, *Linn.*
Jambosa vulgaris, *DC.*, syn. of Eugenia jambos, *Linn.*
Jamboo, HIND., Inga xylocarpa, *DC.*, *W. & A.*
Jambool, MAHR., Eugenia jambolana, *Lam.*, *Roxb.*
Jambu malacca maram, TAM., Eugenia malaccensis, *Linn.*
Jambu-monat, MALAY, Anacardium occidentale, *Linn.*
Jambu-nawel maram, TAM., Eugenia jambos, *Linn.*
Jammi chettoo, TEL., Prosopis spicigera.
Jamo, URIA ? Eugenia jambolana, *Lam.*, *Roxb.*
Jamoa of Panjab, Elæodendron roxburghii.
Jamoon, HIND., Eugenia caryophyllifolia, *Roxb.*, also Eugenia jambolana, *Lam.*
Jamoon, jamun, jamu, jammu, HIND., Syzygium jambolanum, *DC.*, also Syzygium laterifolium,
Jamun of Chenab and Kanawar, Prunus padus, *Linn.*
Jana, TEL., Grewia rothii, *DC.*
Jana palaseru, TEL., Antidesma paniculatum, *Rxb.*
Jand, PANJAB, Acacia leucophlœa, *Willd.*
Jand-ber of Jhullundhur, Zizyphus nummularia, *W. & A.*
Jangal parungi, PANJ., Quercus semecarpifolia.
Jangli am, DUK., Spondias mangifera, *Pers.*
Jangli badam, BENG., Sterculia fœtida, *Linn.*
Jangli-fras of Cashmere, Populus alba, *L.*
Jangli rai am, HIND., Tetranthera, *Species.*
Janum chettu, TEL., Prosopis spicigera, *Linn.*
Jaoz, PERS., Juglans regia, *Linn.*
Jard-aru, PUSHT., Armeniaca vulgaris.
Jari, PANJ., Quercus ilex, *Linn.*
Jarlangai, PUSHTU, Lonicera quinquelocularis.
Jarool, BENG. Jarul, BENG. HIND., MALEAL., Lagerstrœmia reginæ, *Roxb.*
Jaru-mamidi, Buchanania latifolia, *Roxb.*, *W. & A.*
Jarse, FIJI, Santalum album, *Linn.*, *Roxb.*
Jassoond, Hind. of Bombay, Antiaris innoxia, *Blume.*
Jati, MALAY, Tectona grandis.
Jauz makaddam, AR., the fruit of Pavia indica, *Royle, Il. Him. Bot.*
Java almond, ENG., Canarium commune, *Linn.*
Javerne (Yaverne), Tam. at Trincomalie, Alseodaphne semicarpifolia.
Jawa, MALAY, Tamarindus indica, *Linn.*, *Roxb.*
Jawa also jawasa, jawan, plains of Panjab, Alhagi maurorum, *Tourne*, *W. & A.*
Jegura, TEL., Amanoa patula, *Thw.*
Jeram kottam, MALEAL., Antidesma paniculatum, *Roxb*
Jembu-neredi manu, TEL., Eugenia jambos, *Linn.*
Jeriam kottam, MALEAL, Antidesma paniculatum, *Roxb.*
Jerooc, MALAY, Citrus aurantium, *Linn.*
Jerusalem thorn, ENG., Parkinsonia aculeata, *Linn.*, *W. & A.*
Jet, also jaith, HIND., Sesbania ægyptiaca, *Pers.*
Jeebun, BENG., Sponia orientalis, *Voigt.*
Jewun-pootr, MAHR., Putranjiva Roxburghii, *Wall.*
J'hada, GUZ., Tree.
Jhand, HIND., Prosopis spicigera, *Linn.*, *W. & A.*
J'har, DUK., HIND., MAHR., Tree.
J'hara, GUZ., Tree.
Jhar-katchura, MAHR., Strychnos nux vomica, *Linn.*, *Roxb.*
Jhau, PANJ., Tamarix dioica, *Roxb.* also T. gallica, *Linn.*
Jidi chettu, TEL., Semecarpus anacardium, *Linn.*

CSL

Jidiginzalu, Tel., Semecarpus anacardium, *Linn.*
Jidi mamidi, Tel., Anacardium occidentale, *Linn.*
Jilpai, Hind., Ixora parviflora, *Vahl.*
Jilugu, Tel., Æschynomene aspera, *Linn.*
Jilugu bendu, Tel., Æschynomene aspera, *Linn.*
Jilledu chettu, Tel., Calotropis gigantea, *R. Br.*
Jindana, Malay, Santalum album, *Linn.*, *Roxb.*
Jingan of Simla hills, Odina woodier, *Roxb.*
Jinti of Chenab, Prinsepia utilis, *Royle.*
Jirudu of Ravi, Gardenia tetrasperma.
Jirugu. Tel., Caryota urens, *Linn.*
Jittegi, Tel., Dalbergia latifolia, *Roxb.*, *W. & A.*
Jjul, Sans., Barringtonia acutangula, *Gærtn.*
Joe-boe, Burm., Walsura piscidia, *Roxb.*
Jojh, Pers., Alhagi maurorum, *Tourne*, *W. & A.*
Jombi, Jav., Areca catechu, *Linn.*
Jonesia pinnata, *Willde*, syn. of Jonesia asoka, *Roxb.*, *W. & A.*
Jouk-bin, Burm., Elæodendron integrifolia.
Jouz-i-hindi, Arab, Pers., Cocos nucifera, *Linn.*
Jowli, Guz., Hind., Cadjan.
Jootee, Hind., Putranjiva roxburghii, *Wall.*
Jooz-ul-kueh, Arab., Randia dumetorum, *Lam.*
Juari, Panj., Syringa emodi, *Wall.*
Jugani-chukur, Hind., Gmelina arborea, *Roxb.*
Juglans-camirium, *Lour.*, Aleurites triloba, *Forst.*
Juglans catappa, *Lour.*, syn. of Terminalia catappa, *Linn.*
Juguya doomoor, Beng., Ficus glomerata, *Roxb.*
Jujube tree, Eng., Zizyphus jujuba, *Willde.*
Julgoseh, Pusht., Pinus gerardiana, *Wall.*
Jumla of Panjab, Terminalia arjuna, *W. & A.*
Jumrassee, Hind., Elæodendron paniculatum.
Jungle bendy, Anglo-Tam., Erinocarpus nimmonii.
Jungle bendy of Bombay, Tetrameles nudiflora, *R. Br.*, *W. Ic.*
Jungle nail tree, Eng., Acacia tomentosa, *Willd.*
Jungli badam, Hind., Canarium commune, *Linn.*, also Terminalia catappa, *Linn.*
Jungly karinj, Hind., Terminalia alata, *Ainslie.*
Juniperus arborea, syn. of Juniperus excelsa, *Bieb.*
Justicia adhatoda, *L.*, syn. Adhatoda vasica, *Nees.*
Juvasa, Juwassa, Beng., Alhagi maurorum, *Tourne.*
Juvi manu, Tel., Ficus virens.
Juvru mamidi, Tel., Spondias mangifera, *Pers.*
Juwansa, Hind., Alhagi maurorum, *Tourne.*
Juyuntee, Hind., Sesbania ægyptiaca, *Pers.*
Juzoogree, Hind. of Concan and Guzerat.

K

Ka of Sutlej and Kanawar, Juglans regia, *Linn.*
Kaat, properly Kat'h, Tam., Maleal., Can., wild, uncultivated.
Kaat manga, Tam., Buchanania latifolia, *Roxb.*
Kaat Illupa, Tam., Bassia latifolia, *Roxb.*
Kababa, Hind., Xanthoxylon hostile.
Kabuli bubbur, H. Acacia arabica, var.
Kabuli kikar, H. Acacia arabica, var.
Kabuli kikar of Panjab, Acacia farnesiana, *Willd.*
Kachal of Hazara, Abies smithiana, *Wall.*
Kacham, East Kumaon, Ulmus integrifolia, *Roxb.*
Kachana, Tel., also Kachini, Tel., Bauhinia acuminata, *Linn.*, also Bauhinia tomentosa, *Linn.*
Kach-lai, Panj., Tamarix dioica, *Roxb.*, also Tamarix gallica, *Linn.*
Kachnar, Hind., Bauhinia tomentosa, *Linn.*, also Bauhinia variegata, *L.* var.
Kachu, Malay, Areca catechu, *Linn.*
Kadali pua, Tam., Lagerstrœmia reginæ, *Roxb.*
Kada pilva, Maleal., Morinda citrifolia, *Linn.*
Kaddam, Hind., Nauclea cadamba, *Wall.*
Kadisheo, Tel., Amanoa collina, *Baillon.*
Kadol, Singh., Rhizophora, *Species.*
Kadondong, Malay, Emblica officinalis, *Gærtn.*
Kadon-kadet, Burm., Connarus speciosa.
Kadoo-ma, Tam., Cerbera odallam, *Gærtn.*
Kadoombaireya-gass, Singh., Diospyros gardeneri, *Thw.*
Kadu beriya? Singh., Diospyros ebenum, *Linn.*
Kadukai maram, Tam., Terminalia chebula, *Retz.*
Kaga, Burm., Careya, *Species.*
Kagash, Panj., Cornus macrophylla, *Wall.*
Kaghaniya of Kanawar, Staphylea emodi?
Kaha (yellow) milla, Singh., Vitex altissima, *Linn.*
Kaha-kaala-gass, Singh., Diospyros toposia, *Ham.*
Kahatta gaha, Singh., Careya arborea, *Roxb.*
Kahi, Panjab, Ulmus campestris, *L.*
Kahimmal of Salt Range, Ficus venosa.
Kahua, Hind., Terminalia arjuna, *W. & A.*
Kaiaboka wood tree, Eng., Pterospermum indicum, *Wall.*
Kail or kaili or khal of Sutlej, Pinus excelsa, *Wall.*
Kaim of Panjab, Nauclea parvifolia, *Roxb.*
Kaimanis, Malay, Cinnamomum zeylanicum.
Kain, Panjab, Ulmus campestris, *Linn.*
Kaint of Ravi, Pyrus variolosa, *Wall.*
Kaippal, Hind., Myrica sapida.
Kairwal, Panjab, Bauhinia variegata, *Linn.*
Kaju, Beng., Hind., Kaju-gass, Singh., Anacardium occidentale, *Linn.*
Kake or kok of Kanawar, Ficus caricoides.
Kakal, Can., Cassia fistula, *Linn.*
Kaka jemboo, Sans., Eugenia caryophyllifolia, *Roxb.*
Kakalas, Singh., Cyathocalyx zeylanicus, Champ.
Kakar of Kangra and Salt Range, Pistacia integerrima, *H. f. & Th.*
Kaka tanduka, Sans., Diospyros tomentosa, *Roxb.*
Kaka-tati, Tam., Diospyros ebenum, *Linn.*, Ebony.
Kaka ulimera, Tel., Diospyros cordifolia, *Roxb.*
Kakinda, Sans., Diospyros melanoxylon, *Roxb.*
Kakkaran of Ravi, Rhus buckiamela, *Roxb.*
Kakkiti chettu, Tel., Gardenia latifolia, *Ait.*
Kako-dumbari, Gmelina arborea, *Roxb. Cor. Pl.*
Kakrai of Chenab, Panj., Acer creticum, *Linn.*
Kakrain of Kangra and Salt Range, Pistacia integerrima, *H. f. & Th.*
Kakrangche of Kanawar, Pistacia integerrima, *H. f. & Th.*
Kakru of Kumaon, Rhus acuminata, *DC.*
Kaku, Panj., Flacourtia sapida, *Roxb.*
Kakupala, Tel., Zizyphus glabrata, *Heyne.*
Kala aja, Beng., Ehretia serrata, *Roxb.*
Kala bachnak, Duk., Hind., Hymenodyction excelsum, *Wall.* in *Fl. Ind.*
Kala bis of Kaghan, Hippophaæ salicifolia.
Kala drooma, Sans., Terminalia moluccana, *Willde.*
Kalagoru, Tel., Stereospermum chelonoides, *W. I.*, also Stereospermum suaveolens, *W. Ic.*

Kalam, also Dewdar of Salt Range, Cedrus deodara, *Loud.*
Kala koodoo, Hind., Mahr., Wrightia tinctoria.
Kalamba, Malay, Aquilaria agallocha, *Roxb.*
Kalambak, Jav., Eagle wood.
Kalambir, Malay, Cocos nucifera, *Linn.*
Kalanath, Mehra forest, Hazara, Cerasus.
Kalanchi of Panjab, Desmodium tiliæfolium.
Kalapa, Jav., Malay, Cocos nucifera, *Linn.*
Kalham of Panjab, Nauclea parvifolia, *Roxb.*
Kaliana murukai, Tam., Erythrina indica, *Lam.*
Kalighutru, Tel., Stereospermum chelonoides, *W. Ic., DC.*
Kaligoru, Tel., Stereospermum chelonoides, *W.I.*
Kaligottu, Tel.,Stereospermum chelonoides, *W.I.*
Kali-kikar, Duk., Acacia arabica, *Willd., W. & A.*
Kalinga, Tel., Dillenia speciosa, *Thunb.*
Kalingamu,Tel.,Wrightia antidysenterica, *R.Br.*
Kali ring, Panj., Quercus dilatata, *Lindl.*
Kali sirin, Panj., Albizzia lebbek, *Benth.*
Kalkoli or kankol of Kaghan, Eleagnus conferta.
Kallian of Sutlej, Cupressus torulosa.
Kaloo-habaraleya-gass, Singh., Macreightia buxifolia, *Pers.*
Kalo jam, Beng., Eugenia jambolana, *Lam.*
Kalo-jamun, Beng., Eugenia jambolana, *Lam.*
Kaloo-kadoombaireya-gass, Singh., Diospyros oppositifolia, *Thw.*
Kaloo-midereya-gass, Singh., Diospyros quæsita, *Thwaites.*
Kal oowara gass, Singh., Diospyros ebenum, *L.*
Kalthaun of Pañjab, Ehretia serrata, *Roxb.*
Kaluba baraliya, Singh., Maba buxifolia, *Pers.*
Kalugoru,Tel., Stereospermum chelonoides, *W.I*
Kalumederiye, Singh., Calamander wood.
Kalu vere, Singh., Ebony.
Kal woora gass, Diospyros ebenum, *Linn.*
Kamal, Malay, Tamarindus indica, *Linn.*
Kama-ranga, Beng., Hind., Averrhoa bilimbi, *Willde*, also Averrhoa carambola, *Linn.*
Kamarkhas, Butea frondosa, *Roxb.*
Kamba, Hind., Careya arborea, *Roxb.*
Kambha, Panjab, Rottlera tinctoria, *Roxb.*
Kambhoji, Sans., Adenanthera pavonina, *Linn.*
Kambo pisin, Tam., Gardenia lucida, *Roxb.*
Kametti, Maleal., Excœcaria jamettia, *Spreng.*
Ka m'houng of Akyab, Bignonia stipulata, *Roxb.*
Kamiri, Jav., Aleurites triloba, *Forst.*
Kamlai also Kambal of Salt Range, Odina wodier, *Roxb.*
Kamma-regu, Tel., Artocarpus lakoocha, *Roxb., W. Ic.*
Kampira,Maleal.,Semecarpus anacardium, *Linn.*
Kamputumma, Tel.,Vachellia farnesiana, *W.&A.*
Kam-ruk, Hind., Averrhoa carambola, *Linn.*
Kamrup, Beng., Ficus benjamina, *Linn.*
Kamuga, Tam., Areca catechu, *Linn.*
Kamul, Hind., Qu: Kamela, Rottlera tinctoria, *Roxb.*
Ka-næ-Kya-tha,Burm.,Artocarpus echinata,*Roxb*
Kanagalu, Mahr., Dillenia pentagyna, *Roxb.*
Kana-yoe, Burm., Pirardia sapida, *Royle.*
Kana goraka, Singh., Hebradendron gambogioides.
Kanapa chettu, Tel., Barringtonia acutangula, *Gærtn.*
Kana raja, Hind., Bauhinia nitida, also Bauhinia candida, var.
Ka-na-zo, Burm., Heritiera minor, *Lam.*, also Heritiera littoralis, *Ait.*
Kancha, Tel., Bauhinia purpurea, *Linn.*
Kanchan chakta, Bng.,Bauhinia acuminata, *Linn.*
Kanchana, Maleal, Bauhinia tomentosa, *Linn.*
Kanchanamu, Tel., Michelia champaca, *Linn.*
Kanchi maram, Tam. of Ceylon, Ulmus integrifolia, *Roxb.*
Kanda-gass, Singh., Macaranga tomentosa, *W. Ic.*
Kandalanga, Tam., Xylocarpus granatum, *Kœn.*
Kandaloo, Tel., Cytisus cajan, *Linn.*
Kandar, Panj., Cornus macrophylla, *Wall.*
Kandei, Panj., Flacourtia sapida, *Roxb.*
Kanden karra, Maleal, Canthium parviflorum *Lam.*
Kandre of Kanawar, Abies smithiana, *Wall.*
Kandru, Panj., Cornus macrophylla, *Wall.*
Kandulu, Tel.,Cytisus cajan, *Linn.*
Kaneel, Dut., Cinnamomum zeylanicum, *Nees.*
Kaner, Hind., Nerium odoratum, *Lam.*
Kanera, Panjab, Hamiltonia suaveolens, *Roxb.*, of Bias, Pavia indica, *Royle.*
Kangar or Khangar of Murree hills, Pistacia integerrima, *H. f. & Th.*
Kanger, Salt Range, Grewia betulæfolia, *Juss.*
Kangi of Panjab, Lycium europæum, or Luzar edgeworthii.
Kangla of Chenab, Ravi, Acer creticum, *Linn.*
Kangu, Panj., Flacourtia sapida *Roxb.*
Kangunee, Mahr., Celastrus montana, *Roxb.*
Kaniga, Tel, Pongamia glabra, *Vent.*
Kanigi, Panj., Flacourtia sapida, *Roxb.*
Kanigi chettu, Tel., Barringtonia acutangula, *Gærtn.*
Kanju, Panjab,Kumaon,Ulmus integrifolia, *Roxb.*
Kankadu chettu, Tel., Sapindus emarginatus, *Vahl.*
Kankoombala-katteya-gass, Singh., Pygeum ceylanicum, *Gærtn.*
Kankra, Beng., Bruguiera rheedii, *l'Herit.*
Kano-raj, Beng., Bauhinia candida, var.
Kan regu, Flacourtia ramontchi, *l'Herit.*
Kanta sair, Mahr., Bombax malabaricum, *DC.*
Kantal, Beng., Artocarpus integrifolia, *Linn.*
Kantalu, Panjab, Hamiltonia suaveolens, *Roxb.*
Kanuga chettu, Tel., Pongamia glabra, *Vent.*
Kanuk-champa, Bng., Ochna squarrosa, *Willde*, also Pterospermum acerifolium, *Willde.*
Kanur of Ravi, Pavia indica, *Royle.*
Ka nyeen tha? Burm., Dipterocarpus lævis, *Buch.*
Ka-nyin, Burm., Dipterocarpus alatus, *Roxb*
Kan-young, Burm., Dipterocarpus, *Species.*
Kapalam, Lampung, Mangifera indica, *Linn.*
Kapila, Hind., Rottlera tinctoria, *Roxb.*
Kapilapodi, Tam., Rottlera tinctoria, *Roxb.*
Kar of Kanawar, Celtis caucasica, *Willde.*
Kara angolam, Maleal., Alangium lamarkii, *Thw.*
Karacho, Can., Hardwickia binata, *Roxb.*
Karadlu, Panjabi, Acer levigatum, *Wallich.*
Karai-cheddi, Tam., Canthium parviflorum, *Lam.*
Karak, Hind., Cordia vestita, *H. f. et T.*
Karaka, Duk., Tel., Sterculia colorata, *Roxb.*
Karakai chettu, Tel., Terminalia chebula, *Retz.*
Karaka maram Tam., Zizyphus glabrata, *Heyne.*
Kara kundal, Maleal, Lumnitzera racemosa, *Willde.*
Karal, Panj., Bauhinia variegata, *L.*, var.
Karambu, Mahr., Olea dioica, *Roxb.*
Karan, Hind., Morus parvifolia.
Karan cuttay, Tam. of Ceylon, Ixora parviflora.
Karandlu, Panjabi, Acer levigatum, *Wallich.*
Karang cottay, Tam., Ixora parviflora, *Vahl.*

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Kar[illegible]lly maram, Tam., Acacia sundra, *DC.*
Kar[illegible], Quercus ilex, *Linn.*
Kara nuchi, Can., Maleal., Vitex trifolia, *Linn.*
Karar, Panj., Bauhinia variegata, *L.*, var.
Karasa, Tel., Ficus asperrima, *Roxb.*
Karawilla also kabella, Singh. Antidesma bunias, *Spreng.*
Karcheea of the Godavery, Nyctanthes arbor-tristis, *Linn.*
Kardahee, Hind., Conocarpus myrtifolium.
Kare-bepon, Maleal., Bergera konigii, *Linn.*
Karee, Hind., Uvaria, *Species.*
Kareo of N. W. Pro., Albizzia elata.
Kareyapela, Maleal., Bergera konigii, *Linn.*
Kargam, Pangi., Celtis caucasica, *Willde.*
Karha, Panj., Albizzia odoratissima, *Benth.*
Kariampaku chettu, Tel., Bergera konigii, *Linn.*
Karil, Panjabi, Capparis aphylla, *Roxb.*
Karill, Maleal., Sterculia fœtida, *Linn.*
Kari also mimarari of Chenab, Rhamnus purpureus, *Royle.*
Karintha gara, Maleal., Pterocarpus marsupium, *Roxb.*
Karinguva, Tel. Gardenia latifolia, *Ait.*
Kari-vepelli maram, Tam., Bergera konigii, *Linn.*
Karivepa, Tel., Bergera konigii, *Linn.*
Kari-velam, Tam., Acacia arabica, *Willd.*
Karing of Pakatan of Borneo, Tree.
Krintha karra, Maleal., Albizzia odoratissima, *Benth.*
Karir, Panj., Acacia leucophlœa, *Willd.*
Kar-itti, Tam., Dalbergia sissoides, *Grah.*
Kari-velam, Tam., Acacia arabica, *Willd.*
Karkana, Uria, Grewia tiliæfolia, *Vahl.*
Kar of Kanawar, Celtis caucasica, *Willde.*
Karkandhava, Tel., Zizyphus jujuba, *Willde.*
Karkama, Pusthu., Zizyphus nummularia, *W. & A.*
Karka-pulie maram ? Tam., Garcinia cambogia, *Desrous.*
Karmal, Hind., Averrhoa carambola, *Linn.*
Karmar, Panj., Syringa emodi, *Wall.*
Karmbru, also Karmru of Panj., Albizzia odoratissima, *Benth.*
Karngura of Ravi, Prinsepia utilis, *Royle.*
Karpa, Mahr., Barringtonia acutangula, *Gærtn.*
Karpa, Tel., Barringtonia racemosa, *Roxb.*
Karpa, Mahr., Cupania canescens.
Karra, Tel., Timber.
Karri, Tam., Charcoal.
Karrai mutti, Can., Terminalia tomentosa, *W. & A.*
Karrak of Kangra, Celtis caucasica, *Willde.*
Karra maradu, Tel., Terminalia coriacea, *W. & A.*
Karril, Maleal., Vitex leucoxylon, *Roxb.*
Karripak ka jhar, Hind., Bergera konigii, *Linn.*
Karron-gas, Singh., Prosorus indica, *Dalz.*
Karukuva, Tam., Zizyphus glabrata, *Heyne.*
Karum, Panjabi, Euonymus fimbriata, *Wall.*
Karun chembai, Tam., Sesbania ægyptiaca, *Pers.*
Karung, Burm., Pongamia glabra, *Vent.*
Karunga ? Hind., Galedupa arborea.
Karu vagai, Tam., Albizzia odoratissima, *Benth.*
Karvel, Jav., Arenga saccharifera, *Labill.*
Karwat, Can., Mahr., Antiaris innoxia, *Blume.*
Kasa-gaha, Singh., Casuarina equisitifolia.
Kasana, Tel., Bauhinia acuminata, *Linn.*
Kashin of Sutlej, Rhus buckiamela, *Roxb.*
Kashmal, Hind., Berberis lycium, *Royle.*
Kashti of Ravi, Pinus gerardiana, *Wall.*
Kasir of Panjab, Albizzia stipulata, *Boiv.*, also Cornus macrophylla, *Wall.*
Kassow, Duk., Elæocarpus oblongus, *Gærtn.*
Kasturi tumma, Tel., Vachellia farnesiana, *W. & A.*
Katakamu, Strychnos potatorum, *L.*
Katake, Sans., Strychnos potatorum, *L.*, *Willde.*
Katallikai, Tam., Capparis horrida, *Linn.*
Kat ambalam, Maleal., Spondias mangifera, *Pers.*
Katambilla, Singh., Roumea hebecarpa, *Poit.*
Katammal of Kangra, Syzygium jambolanum, *DC.*
Kataping, Bali, Jav., Amygdalus communis, *Linn.*
Kat-atti, Tam., Bauhinia tomentosa, *Linn.*
Kat bel, Beng., Feronia elephantum, *Corr.*
Kat chandan, Hind., Santalum album, *Linn.*
Kat-elle-micha maram, Tam., Atalantia monophylla, *DC.*
Kateria kuli ? Hind., Sterculia urens, *Roxb.*
Ka-tha, Burm., Syndesmis tavoyana, *Wallich.*
Kath-sola, Beng., Sesbania paludosa, *Roxb.*
Kathu, Hind., Acacia catechu, extract, *Willd.*
Kathun ban, Panj., Quercus ilex, *Linn.*
Katila, Hind., Sterculia urens, *Roxb.*
Kat-illupa, Tam., Bassia longifolia, *Linn.*
Katira, Hind., Sterculia urens, *Roxb.*
Katira, Panj., Salix babylonica, *Linn.*
Katish, Panj., Cornus macrophylla, *Wall.*
Kat maam maram, Tam., Spondias mangifera.
Kat mavu, Tam., Spondias mangifera, *Pers.*
Kat miella maram, Tam., Vitex altissima, *Linn.*
Katta mellalu, Maleal., Vitex arborea, *Roxb.*
Kattam, Hind., Eriodendron anfractuosum, *DC.*
Kathu elupæ, Tel., Terminalia belerica, *Roxb.*
Kattoo-keena-gass, Singh., Xanthoxylon rhetsa.
Kattu imbal, Singh., Bombax malabaricum, *DC.*
Kattu puvaras maram, Tam., Rhus decipiens.
Katu andar, Singh., Acacia leucophlœa, *Willd.*
Katu-bodde, Singh., Cullenea excelsa.
Katu-kata-kala, Singh., also Katu kœta kœla, Singh., Bridelia montana, also Briedelia spinosa, *Willde.*
Kata-kurundo, Singh., Phoberos gærtneri, *Thw.*
Katu mellan mara, Maleal., Vitex altissima, *L.*
Katu-pamburu, Singh., Pyrularia wallichiana, *A. DC.*
Katu-vagai, Tam., Albizzia lebbek, *Benth.*
Katul kittu, Singh., Caryota horrida, *Gardn.*
Katur konna, Inga bigemina, *Willde*, *W. & A.*
Katyelloo mitcha maram, Tam., Limonia alata.
Kau-ko, Panj., Olea europæa, *Linn.*
Kauli of Panjab, Abies smithiana, *Wall.*
Kaung-mhoo. Burm., Dipterocarpus, *Species.*
Kauwere of New Zealand, Vitex littoralis.
Kavali, Tam., Tel., Sterculia urens, *Roxb.*
Kavalum, Tam., Sterculia balanghas, *Linn.*
Ka-wa-ka of New Zealand, syn. of Thuja doniana, *Hooker.*
Kawal, Jav., Arenga saccharifera, *Labill.*
Kawar of Panjab, Holarrhena antidysenterica.
Kawtha, Mahr., Feronia elephantum, *Corr.*
Kawilli in Annimullay, Tam., Sterculia guttata, *Roxb.*
Kaya api api, Malay, Rhizophora mucronata, *Lam.*
Kaya-arang, Jav., Malay, Ebony.
Kaya-boca wood, Amboyna wood, Pterospermum.
Kaya gahru, Malay, Aquilaria agallocha, *Roxb.*
Kaya sappan, Malay, Cæsalpinia sappan, *Linn.*,
Kaya-yndhan, Coch-China, Santalum album,
Kayubin ? Burm., Terminalia chebula, *Retz.*
Kayu gahru, Malay, Eagle wood.
Kehur, Panj., Cornus macrophylla, *Wall.*
Ke-an-nan, Burm., Xylocarpus, *Species.*

Kebarra, Push., Capparis spinosa.

Kedangu, Maleal., Sesbania ægyptiaca, *Pers.*

Kedr, Rus., Cedar.

Keemna, Burm., Laurus, *Species.*

Keena, Singh., Calophyllum burmanni, *Wight.*

Keena-gaha, Singh., Calophyllum tomentosum.

Keenjul ? Mahr., Terminalia alata, *Ainslie.*

Keen-we-wæl, Singh., Calamus rotang, *Linn.*

Keerni ka phal, Duk., Mimusops hexandrus, *Roxb.*

Keersel, Mahr., Stereospermum chelonoides, *W. I.*

Keint, kaint, kithu, kiat, gadkuji, keitha; kent of Chenab, Ravi and Bias, Pyrus variolosa, *Wall.*

Keioh, Kayan of Borneo, Tree.

Keitha of Ravi, Pyrus variolosa, *Wall.*

Keli of Chamba, Cedrus deodara.

Keli-kuddum, Beng., Nauclea cordifolia, *Roxb.*

Kelon, Hind., Cedrus deodara, *Loud.*, Larix deodara.

Kelu of Chamba, &c., Cedrus deodara, *Loud.*

Kemal of Murree hills, Odina wodier, *Roxb.*

Kendal, Jav., Cordia myxa, *Linn.*, *Roxb.*

Kendhoo, Uria ? Diospyros ebenum, *Linn.*

Kendu, Panj., Diospyros montana, *Roxb.*, *W. Ic.*

Kendu, Panjab, Beng., Uria, Diospyros tomentosa, *Roxb.*, also Diospyros melanoxylon, *Roxb.*, Ebony.

Kenja, Hind., Galedupa arborea.

Kent of Ravi, Pyrus variolosa, *Wall.*

Keoo, Panjab, Celtis eriocarpa.

Keora, Beng., Sonneratia apetala, *Buch.*

Keori of Chamba, Cedrus deodara.

Keoun lae, Burm., Rottlera, *Species.*

Kere-u of Chamba hills, Quercus dilatata, *Lindl.*, of Ravi, Quercus semecarpifolia.

Kesaramu naga sara, Sans., Mesua ferrea, *Linn.*

Kesu, Duk., of Butea frondosa, *Roxb.*, flowers.

Kewar, Mahr., Acacia leucophlæa, *Willd.*

Keysur, Duk., Nyctanthes arbor-tristis, *Linn.*

Kha boung, Burm., Strychnos nux vomica, *Linn.*

Khadiramu, Sans., Tel., Acacia catechu, *Willd.*

Kha gyee ? Burm. of Moulmein ? Strychnos nux vomica, *Linn.*

Khair, Beng., Hind., Khaira, Hind., Khairaghach, Beng., Acacia catechu, *Willd.*

Khaju, sue, cho of Ravi, Pyrus malus, *Linn.*

Khajur, Hind., Phœnix sylvestris, *Roxb.*

Khanak ul kalb, Ar., Strychnos nux vomica, *L.*

Khanam of Kanawar, Cedrela toona, var. serrata, *Royle.*

Khar, Hind., Prosopis spicigera, *Linn.*

Kharao, Panj., Quercus semecarpifolia.

Khardal, Ar., Salvadora persica, *Linn.*

Khardalo, Syriac, Salvadora persica, *Linn.*

Khareo, Panj., Quercus ilex, *Linn.*, also Quercus semecarpifolia.

Khariz, Panjab, Cotoneaster obtusa, *Wall.*

Kharjal, Hind., Salvadora persica, *Linn.*

Kharlei, Panj., Tamarix orientalis, *L.*

Kharnule, Hindi., Prosopis spicigera, *Linn.*

Kharpalu cherai, Quercus ilex, *Linn.*

Khar pat, Panjab, Garuga pinnata, *Roxb.*

Kharshu of Kanawar, Panj., Quercus incana, also Quercus semecarpifolia.

Kharwe, Pushtu, syn. of Cotoneaster baccillaris, *Vern.*

Khatau, Panj., Quercus semecarpifolia.

Khau, kohu, Panj., Olea europæa, *L.*

Kheir, Mahr., Acacia catechu, *Willd.*

Kheroa, Panjab, Cotoneaster obtusa, *Wall.*

Khete, Mahr., Sapindus, *Species.*

Kheu of Munipur, Melanorrhæa usitatissima, *Wall.*

Khew, Sindi, Bignonia undulata, *Roxb.*

Khilaf-i-balkhi, Hind., Salix babylonica, *Linn.*

Khilara of Kumaon, Panj., Wrightia molissima, *Wall.*

Khilawa, Panj., Wrightia molissima, *Wall.*

Khinjak, Pushtu, Pistacia terebinthus.

Khircha, Pusht., Grewia betulæfolia, *Juss.*

Khishing of Kanawar, Cedrela toona, var. serrata, *Royle.*

Khista, Prunus armeniaca, moist fruit.

Khubani, Prunus armeniaca, dried fruit.

Khubara, Panjab, Ehretia aspera.

Khulain; kajain; papri, Panjab, Ulmus integrifolia, *Roxb.*

Khurreek, Hind., also Khurruk, Hind., Celtis tetandra.

Khurseng, Mahr., Bignonia xylocarpa, *Roxb.*

Khwa, Eng., Tamarix orientalis, *L.*

Khwaga wala, Pushtu, Salix caprea, *Linn.*

Khwarech, Trans-Indus, Acacia catechu, *Willd.*

Khyar-i-chembir, Pers., Cassia fistula, *Linn.*

Khyong-youk, Burm., Garuga pinnata, *Roxb.*

Khoura, Ben., Sonneratia apetala, *Buch.*

Kiat of Chenab, Pyrus variolosa, *Wall.*

Kichakai, Tel., Bambusa.

Kichal, Hind., Bark of Acacia arabica, *Willd.*

Kicha virigi chettu, Tel., Cordia latifolia, *Roxb.*

Kichidi, Tel., Citrus ȃurantium, *Linn.*

Kierka, Beng., Carallia lucida, *Roxb.*

Kikar, Hind., Acacia arabica, *Willd.*, also Acacia leucophlœa, *Willd.*

Kikar ka Gond, Hind., Gum of Acacia arabica.

Kikkar, Hind., Bark of Acacia arabica, *Willd.*

Kilai, Dhauladdar Range, Cedrus deodara, *Loud.*

Kilar of Pangi, Fothergillia involucrata.

Kilawa, Panj., Wrightia molissima, *Wall.*

Kilgatch, Hind., Cæsalpinia sepiaria, *Roxb.*

Kilia of Celebes, Broussonetia papyrifera, *Vent.*

Kiluvy, Tam., of Ceylon, Protium caudatum, *W. & A.*

Kimsukamu, Tel., Butea frondosa, *Roxb.*

Kimu, Hind., Morus serrata.

Kin, Beng., Diospyros tomentosa, *Roxb.*

Kinaka, Beng., Butea frondosa, *Roxb.*, *W. & A.*

Kinghena, Can., Cocos nucifera, *Linn.*

Kinjalkamu, Sans., Mesua ferrea, *Linn.*, *DC.*

Kinnemon, Heb., Cinnamomum zeylanicum, *Nees.*

Kinnu, Panjab, Diospyros tomentosa, *Roxb.*

Kioch, Panjabi, Euonymus fimbriata, *Wall.*

Kiri kong, Singh., Walsura piscidia, *Roxb.*

Kiripelle, Singh., Ficus indica, *Linn.*, *Roxb.*

Kirki of Kangra, Celtis caucasica, *Willde.*

Kirni, Can., Canthium parviflorum, *Lam.*

Kirni, Duk., Mahr., Mimusops hexandrus, *Roxb.*

Kirra, Pushtu, Capparis aphylla, *Roxb.*

Kirri-walla-gass, 'Sing., Holarrhena mitis, *R. Br.*

Kirsaru, Gondi, Nyctanthes arbor tristis, *Linn.*

Kisua agaru, Siam., Eagle wood.

Kitchili maram, Tam., Citrus aurantium, *Linn.*

Kithu of Chenab, Pyrus variolosa, *Wall.*

Kitla, Chenab, Panj., Acer creticum, *Linn.*

Kittul also Kitul, Singh., of Ceylon, Caryota urens, *Linn.*

Kiu, Beng., Diospyros melanoxylon, *Roxb.*

Kinamon, Gr., Cinnamomum zeylanicum, *Nees*

Kje-yoh, Burm., Vitex, *Species.*

Klaare maram, Tam., Casearia elliptica.

Klompan boerong, Malay., Sterculia fœtida, *Linn.*

Kluwi, Malay., Artocarpus integrifolia, *Linn.*

GSL

Knott[illegible] cassia, Eng., Cathartocarpus nodosus, *Voigt.*

Koan, Panj., Tamarix dioica, *Roxb.*, also T. gallica, *Linn.*

Koata naga maram, Tam., Eugenia caryophyllifolia, *Roxb.*

Koathoe, Burm., Myristica, *Species.*

Koathi naga maram, Tam., Eugenia jambolana, *Lam.*

Kobbari chettu, Tel., Cocos nucifera, *Linn.*

Kobin, Burm., Melicocca trijuga, *McClelland.*

Kabo neela, Singh., Vernonia javanica, *DC.*

Kochan, Panj., Cornus macrophylla, *Wall.*

Kodaga pala, Tel., Wrightia antidysenterica, *R. Br.*

Kodalo, Tel., Sterculia, *Species*

Koda pana, Maleal., Corypha umbraculifera, *Linn.*

Kodawah porasham, Tam., Chloroxylon swietenia, *Roxb.*

Kodisa ? chettu, Tel., Wrightia antidysenterica, *R. Br.*

Kodisa pala, Tel., Wrightia antidysenterica, *R. Br.*

Kodi velo, Tam., Acacia tomentosa, *Willd.*

Kodombo, Tel., Nauclea cadamba, *Wall.*

Kodorka maram, Maleal., Terminalia chebula, *Retz.*

Kobella, Singh., Aporosa lindleyana, *Thw.*

Koela, Hind., Charcoal.

Koe of Ravi and Chenab, Alnus, *Sp.*

Kogor of Panjab, Holarrhena antidysenterica, *Wall.*

Koha, Hind., Terminalia arjuna, *W. & A.*

Koher of Salt Range, Sageretia brandrethiana.

Kohlenstoff, Ger., Charcoal.

Koila mookree, Tel., Wrightia tomentosa, *R. & Sch.*

Koish, Panj., Alnus nepalensis.

Koit, Mahr., Hind., Feronia elephantum, *Corr.*

Kokatie, Tam., Xanthochymus ovalifolius, *Roxb.*

Kokeem ? Mahr., Moorgul mara.

Kokkita, Tel., Gardenia latifolia, *Ait.*

Kokoh, Burm., Albizzia, *Species.*

Kokonusse, Ger., Cocos nucifera, *Linn.*

Kokos, Rus, Cocos nucifera, *Linn.*

Kokosnuten, Dut., Cocos nucifera, *Linn.*

Kokum ? Mahr., Moorgul mara.

Kola-koosoomoo, Uria., Schleichera trijuga, *Willd.*

Kola mavah, Tam., Anacardium occidentale, *Linn.*

Kola mukki chakka, Tel., Wrightia antidysenterica, *R. Br.*

Kola-poka, Tel., Areca catechu, *Linn.*

Kolar, Panj., Bauhinia variegata, *L.*, var.

Kolcuttay teak maram, Tam., Premna tomentosa, *Willde.*

Koli maram, Tam., Olea dioica, *Roxb.*

Kolinji maram, Tam., Citrus aurantium, *Linn.*

Kolsa, Hind., Charcoal.

Komma chettu, Tel., Ixora parviflora, *Vahl.*

Kommi chettu, Tel., Stylocarpa webera, *A. Rich.*

Kouchona, Uria, Fruit, Michelia champaca, *Linn.*

Konda gogu, Tel., Cochlospermum gossypium, *DC.*

Konda jiliga, Tel., Caryota urens, *Linn.*

Konda korinda, Tel., Acacia cæsia, *W. & A.*

Konda mamidi ? Tel., Protium caudatum, *W. & A.*

Konda manga, Tel., Gardenia latifolia, *Ait.*

Konda nimma, Tel., Atalantia monophylla, *DC.*

Konda palleru, Tel., Antidesma paniculatum, *R.*

Konda pama, Tam., Caryota urens, *Linn.*

Konda panna maram, Tel., Corypha umbraculifera, *Linn.*

Konda papata, Tel., Stylocoryna webera, *A. Rich*

Konda-poka, Tel., Areca catechu, *Linn.*

Konda tangedu, Tel., Inga xylocarpa, *DC.*

Kondricam, Tam., Vateria indica, *Linn.*

Kongilam maram, Tam., Canarium strictum, *Roxb.*

Konk-koe, Burm., Acacia, *Species.*

Kon-nay-zow, Burm., Heritiera minor, *Lam.*

Konne maram, Tam., Cassia fistula, *Linn.*

Konor, kanor, kanur, Hind. of Beas and Sutlej, Pavia indica, *Royle Ill. Him. Bot.*

Kon-zo-za-loo, Burm., Heritiera littoralis, *Ait.*

Kooda pallei maram, Tam., Holarrhena codaga, also Nerium antidysentericum, *Linn.*

Kookool, Tam., Commiphora madagascarensis, *Lindl.*, *Fl. Med.*

Kookoor choora, Beng., Pavetta indica, *Linn.*

Koolgach, Beng., Zizyphus jujuba, *Willde.*

Koolmara, Can., Calysaccion angustifolia.

Koomala-gundi, Uria, Rottlera tinctoria, *Roxb.*

Koombee, Uria, Careya arborea, *Roxb.*

Koombha, Mahr., Careya arborea, *Roxb.*

Koombook-gass, Singh., Terminalia glabra, *W. & A.*

Koomla, Mah., Cratæva Roxburghii, *R. Br.*

Koon, Beng., Schleichera trijuga, *Willd.*

Koora, Mahr., Ixora parviflora, *Vahl.*

Koorkapuli maram, Tam., Inga dulcis, *Willde.*

Kooruk, Mahr., Cedrela toona, *Roxb.*, also Garuga pinnata, *Roxb.*

Koosoombh, Mahr., Schleichera trijuga, *Willde.*

Koote legree, Can., Sapindus, *Species.*

Kora man, Tel., also Kora manu, Tel., Briedelia spinosa, *Willde.*

Koreda, Tel., Terminalia chebula, *Retz.*

Koree, Godavery, Tel., Ixora parviflora, *Vahl.*

Kori of Kaghan, Quercus ilex, *Linn.*

Kori-kowan, Mahr., Alstonia scholaris, *R. Br.*

Korimi pala, Tel., Ixora parviflora, *Vahl.*

Korin-toware, Tam., Dalbergia latifolia, *Roxb.*

Korivi pala, Circars, Tel., Ixora parviflora, *Vahl.*

Koro-monga, Tel., Averrhoa carambola, *Linn.*

Korra, Tel. ? of Ganjam and Goomsur, Strychnos nux vomica, *Linn.*

Korra chettu, Tel., Schmidelia serrata, *DC.*

Korunja, Uria, Pongamia glabra, *Vent.*

Kos-gaha, Singh., Artocarpus integrifolia, *Linn.*

Kosundra, Panjab, Bauhinia racemosa, *Lam.*

Kotala gas, Singh., Eugenia willdenovii, *DC.*

Kotoko of Ganjam and Goomsur, Strychnos potatorum, *L.*

Kotti naga maram, Tam., Eugenia jambolana, *Lam.*

Koul, Hind., Laurus villosa.

Koulmedvie, Singh., Calamander wood, Diospyros hirsuta, *Linn.*

Koung mhoo, Burm., Vatica, *Species.*

Kowah, Hind. of Jubbulpore, Terminalia arjuna, *W. & A.*

Kowta, Mahr., Feronia elephantum, *Corr.*

Kowtee, Mahr., Hydnocarpus inebrians, *Vahl.*

Krammal of Kanawar, Populus ciliata, *Wall.*

Kranji, Malay., Tamarindus indica, *Linn.*

Kripa, Beng., Lumnitzera racemosa, *Willde.*

Krishna agaru, Tel., Aquilaria agallocha, *Roxb.* Eagle wood.

Krishna vrinta, Sans., Stereospermum suaveolens, *W. Ic.*

GSL

K[illegible]na nimbu, Sans., Bergera konigii, *Linn.*
Kunerakoshi, Tel., Stereospermum suaveolens, *W. Ic.*
Kuchan of Hazara, Abies smithiana, *Wall.*
Ku chandanam, Tel., Pterocarpus santalinus, *Linn.*
Ku-chandana Hind., Adenanthera pavonina, *Linn.*
Kuchila, Beng., Duk., Hind., Strychnos nux vomica, *Linn.*, *Roxb.*
Kuchila luta, Beng., Strychnos colubrina, *Linn.*
Kuchla, Hind., Strychnos nux vomica, *Linn.*
Kuchnar, Hind., Bauhinia variegata, *Linn.*
Kudaka dornatta ? Singh., Strychnos nux vomica, *Linn.*, *Roxb.*
Kudda-vailoo, Can., Nauclea cadamba, *Wall.*
Kuddu-kurundu-gas, Singh., Cinnamomum, litsærefolium, *Thwaites.*
Kuddum, Can., Nauclea parvifolia, *Roxb.*
Kudia nim, Hind., Bergera konigii, *Linn.*
Kudkee, Mahr., Hocomlia montana.
Kudra java, Tel., Putranjiva roxburghii, *Wall.*
Kudrapdukhu, Tam., Sterculia fœtida, *Linn.*
Kuel of Sirmoor and Gurwahl, L'him tser, Chiti of Kanawar, Chamba, &c., Pinus excelsa, *Wall.*
Ku-e-la, Guz, Charcoal.
Kuen-mou-nee, Burm., Lagerstrœmia, *Species.*
Kukai, Panj., Flacourtia sapida, *Roxb.*
Kukandra, Jhelum, Panjab, Acer creticum, *Linn.*
Kukkur; kukkiru; kukur singhi, rikul, of the Panjab, Rhus acuminata, *DC.*
Kukoa, Panj., Flacourtia sapida, *Roxb.*
Kukoor chita, Beng., Tetranthera, *Sp.*
Kukt reora, Mahr., Bignonia undulata, *Roxb.*
Kul, Beng., Zizyphus jujuba, *Willde.*
Kulashin, also Washo of Sutlej, Rhus buckiamela, *Roxb.*
Kuldahan, Conocarpus latifolia, *Roxb.*
Kulgul, Can., Dillenia scabrella, *Roxb.*
Kulla kith mara, Can., Ficus glomerata, *Roxb.*
Kulli, Tam., Euphorbia tiraculli, *Linn.*
Kulli kae, Can., Ficus, *Species.*
Kullooa, Burm., Cerbera manghas, *Linn.*
Kullowa, Burm., Laurus, *Species.*
Kul-mulla, Maleal., Bambusa.
Kumbala, Burm., Sonneratia apetala, *Buch.*
Kumbay maram, Tel., Gardenia latifolia, *Ait.*
Kumbhi, Tel., Careya arborea, *Roxb.*
Kumbi, Hind., Cordia vestita, *H. f. et T.*
Kumbuk ? Singh., Terminalia alata, *Ainslie,*
Kumbulu, Maleal., Gmelina arborea, *Roxb.*
Kumhar, Panj., Gmelina arborea, *Roxb.*
Kumla-nebu, Beng., Citrus aurantium, *Linn.*
Kurka pulie, Maleal., Garcinia cambogia, *Desrous.*
Kunch or koish, Panj., Alnus nepalensis.
Kunchun, Mahr., Bauhinia purpurea, *Linn.*
Kuncudu nuna, Tel., Sapindus emarginatus, *Vahl.*
Kundar of Kumaon, Shorea robusta, *Roxb.*
Kundaru, Hind., Hymenodyction excelsum, *Wall.*
Kundol, Mahr., Sterculia urens, *Roxb.*
Kundrikam, Tam., Boswellia glabra, *Roxb.*
Kundur zuchir, Ar., Boswellia thurifera, *Roxb.*
Kungur or kukker, of Mehra forest Hazara, Fraxinus.
Kunjar, Hind., Sageretia brandre thiana.
Kunjaram of Travancore, Strychnos nux vomica, *Linn.*
Kunji tundhe, &c., of Ravi, Rhamnus purpureus, *Royle.*
Kunjul ? Mahr., Terminalia alata, *Ainslie, W. Ic.*

Kunkudu, Tel., Kunkudu karra, Tel., Kunkudu wood, Anglo-Tel., Sapindus emarginatus, *Vahl.*
Kunkumapuvvu chettu, Tel., Rottlera tinctoria, *Roxb.*
Kunna, Burm., Pierardia, *Species.*
Kun-na-zoo, Burm., Heritiera minor, *Lam.*
Kunneen, Burm., Myristica, *Species.*
Kunour, Hind., Pavia indica, *Royle.*
Kunsh, Sutlej, Alnus, *Sp.*
Kunthi ? Burm., Areca catechu, *Linn.*
Kunthrekum, Maleal., Boswellia glabra, *Roxb.*
Ku-nu-nu, Burm., Sterculia, *Species.*
Kura, Panjab, Holarrhena antidysenterica, *Wall.*
Kura-marthi mara, Can., Terminalia alata, *Ains.*
Kuranj, Hind., Mahr., Honge, Can.
Kurg, Pangi, &c., Celtis caucasica, *Willde.*
Kuri of Kumaon, Holarrhena antidysenterica, *Wall.*
Kurkatta maram, Tam., Zizyphus glabrata, *Heyne.*
Kurkni, Jhelum and Kaghan, Marlea begonifolia, *Roxb.*
Kurkuni, Hazara, Gardenia tetrasperma.
Kur kutila ? Hind., Sterculia urens, *Roxb.*
Kurkutta wood, Eng., Zizyphus glabrata, *Heyne.*
Kurmeja ? Hind., Galedupa arborea.
Kurmul, Mahr., Dillenia pentagyna, *Roxb.*, also Dillenia scabrella, *Roxb.*
Kurpa, Mahr., Memecylon tinctorium, *Kon.*
Kurre mara, Can., Diospyros ebenum, *Linn.*
Kurrera, Mahr., Trophis aspera, *Retz.*
Kurroopally maram, Tam., Putranjva roxburghii, *Wall.*
Kurrawa, Burm., Laurus, *Species.*
Kurru-vaylam, Maleal., Acacia arabica, *Willde.*
Kursee, Tel., Kutseea, Tel., Amanoa collina, *Baillon.*
Kurugaha, Singh., Cleidion javanicum, *Blume.*
Kuruk, Hind., Garuga pinnata, *Roxb.*
Kurukiti, Tel., Gardenia latifolia, *Ait.*
Kurundu, Singh., Cinnamomum zeylanicum, *Nees.*
Kurunj, Mahr., Pongamia glabra, *Vent.*
Kurunja, Beng., Pongamia glabra, *Vent.*
Kurwan, Mahr., Cratæva roxburghii, *R. Br.*
Kurwul, Can., Diospyros, *Species.*
Kusharta mara, Can., Embryopteris glutinifera, *Roxb.*
Ku shu of Ladak, Pyrus malus, *Linn.*
Kusnir, Beng., Ficus elastica, *Roxb.*
Kusoomb, Mahr., Schleichera trijuga, *Willd.*
Kusturi peetuma, Tel., Acacia farnesiana, *Willd.*
Kut, Hindi of Kumaon, Lagerstrœmia parviflora, *Roxb.*
Kutaja, Sans., Wrightia antidysenterica, *R. Br.*
Kutajamu, Tel., Wrightia antidysenterica, *R. Br.*
Kutber, Zizyphus kutber.
Kuta mara, Can., Nauclea parvifolia, *Roxb.*
Kutmurrah, Hind., Tetranthera, *Sp.*
Kutti or kutilai of Murree hills, Hazara, &c. Daphne oleoides.
Kuvalam, Maleal., Ægle marmelos, *Corr.*
Kuvidara, Sans., Bauhinia candida, var., also Bauhinia variegata, *Linn.*
Kuwari or puari of Kaghan, Ficus caricoides.
Kuyon, Burm., Tectona grandis.
Kuzzo, Burm., Pierardia, *Species.*
Kwun-ben, Burm., Areca catechu, *Linn.*
Kyaboka wood, Eng., Pterospermum indicum, *Wall*
Kyai-gyee, Burm., Barringtonia speciosa, *Linn.*
Kyai-tha, Burm., Barringtonia acutangula, *Gaertn.*
Kyamal of the Murree hills, Odina wodier, *Roxb.*

Kyau, Tam., Eugenia willdenovii, *DC.*
Kyar ; kanyar, Hind., Cassia fistula, *Linn.*
Kyau-thoo, Burm., Dipterocarpus, *Species.*
Kya-ya, Burm., Mimusops elengi, *Linn., Roxb.*
Kya-zu ? Burm., Terminalia chebula, *Retz.*
Kydia angustifolia, Arn., Julostylis angustifolia, *Thw.*
Kydia fraterna, *Roxb.*, syn. of Kydia calycina, *Roxb.*
Kye-zai, Burm., Laurus, *Species.*
Kyne, Burm., Vitex, *Species.*
Kyoon-na-bin, Burm., Premna pyramidata, *Wall.*
Kyoun-douk, Burm., Bignonia, *Species.*
Kyumboe ? Burm., Gmelina arborea, *Roxb.*
Kyur of Kangra, Holarrhena antidysenterica, *Wall.*
Kyyar-chember, Ar., Cassia fistula, *Linn.*

L

La bhan, Panj., Populus euphratica, *Oliv.*
Lacoocha, Bread-fruit, Eng., Artocarpus lakoocha, *Roxb.*
Lænætari, Puwak, Singh., Areca dicksonii, *Roxb.*
Lahura, Panj., Tecoma undulata, *G. Don.*
La-gen, Jap., Arenga saccharifera, *Labill.*
Laggar, also baddi of Kander, Salt Range, Ehretia aspera.
Laghunai, Pushtu, Daphne oleoides.
Lagerstrœmia microcarpa, *Wight*, syn. of Lagerstrœmia parviflora, *Roxb. Fl. Ind.*
Lagunæa Patersonia, *B.H.*, syn. of Hibiscus patersonii, *DC.*
La-i, Burm., Bombax malabaricum, *DC., W. & A.*
Lai, Panj., Tamarix dioica, *Roxb.*
Lai-bwai, Burm., Terminalia violata, *McClelland.*
Laila, Panj., Salix tetrasperma, *Roxb.*
Lai and lainga, Panj., Tamarix gallica, *Linn.*
Lain-bha, Burm., Bignonia, *Species.*
La-i-zah, Burm., Lagerstrœmia pubescens, *Wall.*
Lakada-tarana, Singh., Gardenia latifolia, *Ait.*
Lakara, Mahr., timber, Lakaru, Guz., timber.
Lakhar also Titri of Chenab, Rhus acuminata,
Lakra, Hind., Timber.
Laku-chamma, Tel., Artocarpus lakoocha, *Roxb.*
Lal chandana, Duk., Pterocarpus santalinus, *Linn.*
Lall kheir, Hind., Mahr., Acacia sundra, *DC.*
Lallye, Mahr., Albizzia amara, *Boivin., Benth.*
Lalo plant, Eng., Adansonia digitata, *Linn.*
Lal paira, Eng., Psidium pomiferum, *Linn.*
Lal-saffri-am, Hind., Psidium pomiferum, *Linn.*
La moo, Burm., Sonneratia acida.
Lanka sij, Beng., Euphorbia tiraculli, *Linn.*
Larakata sringi, Tel., Terminalia chebula, *Retz.*
Larga of Shahpur, Panjab, Rhus cotinus.
Large-flowered Dipterocarpus, Eng., Dipterocarpus grandiflora, *Wall.*
Larger-wood apple, Eng., Ægle marmelos, *Corr.*
Larix deodara, Cedrus deodara, *Loud.*
Lasora, Hind., Cordia obliqua, *Willd.*
Lasre, Panj., Albizzia odoratissima, *Benth.*
Lasrian, Panj. also Lasrin, Panj., Albizzia lebbek, *Benth.*
Lasrin on the Kishn Ganga, Albizzia stipulata, *Boiv.*
La-thou, Burm., Wrightia antidysenterica, *R. Br.*
Laurus caryophyllus, *Lour.*, syn. of Cinnamomum culitlawan, *Nees.*
Laurus cassia, *Nees* syn. of Cinnamomum aromaticum, *Nees v Esen.*
Laurus cinnamomum, Andrew's Report, syn. of Cinnamomum aromaticum, *Nees v. Esen.*
Laurus cinnamomum, *Linn.*, syn. of Cinnamomum zeylanicum, *Nees.*
Laurus culitlawan, *Roxb.*, syn. of Cinnamomum culitlawan, *Nees.*
Laurus malabathrica, *Soland*, syn. of Cinnamomum eucalyptoides.
Laurus nitida, *Roxb.*, syn. of Cinnamomum nitidum, *Nees.*
Laurus obtusifolia, *Roxb.*, syn. of Cinnamomum obtusifolium, *Nees.*
Lawoloo, Singh., Sapota ? *Species.*
Lawsonia inermis, *Roxb.*, syn. of Lawsonia alba.
Lawulu, Singh., Chrysophyllum roxburghii, *G. Don*
Leafless caper, Eng., Capparis aphylla, *Roxb.*
Leafless euphorbia, Eng., Euphorbia royleana.
Leafy mangrove, Eng., Rhizophora, *Species.*
Lebuk of Avicenna, syn. of Cordia myxa, *Linn.*
Legno del Brasile, It., Cæsalpinia sappan, *Linn.*
Legno di ferro, It., Iron wood.
Legno rodie, It., Rosewood.
Lehan, Panjab, Cotoneaster obtusa, *Wall.*
Lei, Panj., Tamarix dioica, *Loxb.*
Lein, Burm., Terminalia bialata, *Wall.*
Lendya, Hindi of Central Provinces, Lagerstrœmia parviflora, *Roxb.*
Leno de rosa, Sp., Rosewood.
Lepan, Burm., Bombax malabaricum, *DC.*
Lepurandra saccidora, *Nimmo*, syn. of Antiaris innoxia, *Blume.*
Lesser jack, Eng., 'Artocarpus chaplasha, *Roxb.*
Lessura, Hind., Cordia myxa, *Linn.*
Let-htuk, Burm., Alstonia scholaris, *R. Br.*
Let khop, Burm., Sterculia fœtida, *Linn.*
Le toak, Burm., Vateria, *Species.*
Let pan, Burm., Eriolæna hookeriana, *W. & A.*
Leuri, east of Sutlej, Cupressus torulosa, *Don.*
Leuri or suri of Sutlej, Juniperus excelsa, *Bieb.*
Lhandalaghuni, Panj., Buxus sempervirens, *Linn.*
Lhim, tser, chiti of Kanawar, Chamba, &c., Pinus excelsa, *Wall.*
Limanza of Pushtu, Pinus excelsa, *Wall.*
Li of Sutlej, Olea europæa, *Linn*, also Pyrus malus,
Liang-gaha, Singh., syn. of Blackwellia ceylanica, *Gardner.*
Libi libi, Eng., Cæsalpinia coriaria, *Willde.*
Lichakhro also armura, phaphar chor, of Kangra, &c., Coriaria nepalensis.
Lieng-mau, Burm., Citrus aurantium, *Linn.*
Lign aloes, Eng., also Lignum aloes, Lat., Eagle-wood.
Lignum colubrinum., Lat., Strychnos colubrina ; also Strychnos nux vomica, *Linn.*
Lignum ferreum, Lat., Iron wood.
Lignum vitæ of Pegu, Melanorrhœa usitatissima, *Wall.*
Lilac, Eng., Melia azedarach, *Linn.*
Lillun, Panjab, Cotoneaster obtusa, *Wall.*
Limonia bilocularis, *Roxb.*, syn. of Sclerostylis atalantoides, *Blume.*
Limonia crenulata, *Roxb.* syn. of Limonia acidissima, *L.*
Limonia monophylla, *Roxb.*, syn. of Atalantia monophylla, *DC.*

Limo[illegible] pumila, BURM., syn. of Atalantia monophylla, *DC.*
Lin, PANJAB, Cotoneaster obtusa, *Wall.*
Lingoa wood tree, ENG., Amboyna-wood, Pterospermum indicum, *Wall.*
Lippe-anghoru, SINGH., Charcoal.
Liquid amber tree, ENG., also
Liquid storax tree, ENG., Liquidambar altingia, *Blume.*
Lirni, HIND., Mimusops kauki, *Linn.*
Lisan-ul-assafir, AR., Wrightia antidysenterica, *R. Br.*
Litsæa trinervia, *Moon*, syn. of Litsæa zeylanica.
Locust tree, ENG., Hymenæa courbaril, *Linn.*
Lodar, PANJAB, Symplocos cratægiodes, *Don.*
Lodduga, TEL., Symplocos racemosa, *Roxb.*
Lodh, HIND., BENG., Symplocos paniculata, also S. racemosa, *Roxb.*, also S. cratægiodes, *Don.*
Lodhar, HIND., Symplocos panculata.
Lodhar of Kangra, Falconeria insignis, *Royle, Ill.*
Lodhoka sijhoo, URIA ? Euphorbia tiraculli, *Linn.*
Lofty pine, ENG., Pinus excelsa, *Wall.*
Loj, PANJAB, Symplocos cratægiodes, *Don.*
Lolagu, TEL., Pterospermum suberifolium, *Ram.*
Lolan, Amboyn, Cæsalpinia sappan, *Linn.*
Lolti, PANJ., Syringa emodi, *Wall.*
Lolu, SINGH., Cordia myxa, *Linn.*, *Roxb.*
Lolugu chettu, TEL., Loluga karra, TEL., Pterospermum heyneanum.
Long-pointed maple, syn. of Acer caudatum.
Lontar, MALAY, Borassus flabelliformis, *Linn.*
Lontarus domestica, *Rumph*, syn. of Borassus flabelliformis, *Linn.*
Loodh ? SANS., ? Cedrela toona, *Roxb.*
Looking-glass tree, ENG., Heritiera littoralis, *Ait.*
Loon of Mehra forest, Hazara. Pyrus, *Sp.*
Loonoo-ankenda-gass, SINGH., Xanthoxylon triphyllum, *Juss.*, *Roxb.*
Loquat, Vernac. Eriobotrya japonica, *Lindley.*
Lor, PUSHTU, Ehretia aspera.
Lotus of the ancients, Zizyphus jujuba, *Willde.*
Louz, AR., Amygdalus communis, *Linn.*
Louzan, MALAY, Amygdalus communis, *Linn.*
Lu, PANJAB, Symplocos cratægiodes, *Don.*
Luagru, TEL., Morinda tinctoria, *Roxb.*
Luar, PANJ., Tecoma undulata, *G. Don.*
Luban, BENG., DUK., HIND., PERS., Boswellia thurifera, *Roxb.*
Luban, HIND., Styrax benzoin, *Dryander.*
Lukat, HIND., Eriobotrya japonica, *Lindley.*
Luki, TEL., Vitex leucoxylon, *Roxb.*
Lumbo, BURM., Buchanania latifolia, *Roxb.*
Lun or luni, of Murree hills, Cotoneaster baccillaris, also Cotoneaster obtusa, *Wall.*
Lunu madala, SINGH., Stereospermum chelonoides, *W. Ic.*,
Lunu midella, SINGH., Melia composita, *Willde.*
Lurelaga, TEL., Limonia acidissima, *L.*, *DC.*
Lusora, HIND., Cordia myxa, *Linn.*, *Roxb.*, *Fl.*
Luteo ? HIND., Pierardia sapida, *Royle.*
Lutiana, ASSAM, Alstonia scholaris, *R. Br.*
Luvunga, BENG., Eugenia caryophyllata, *Thun.*

M

Maal, PANJ., Populus balsamifera, *Linn.*
Maba buxifolia, PERS., syn. of Ferreola buxifolia, *Roxb.*
Macharla maram, Tam. of Ceylon, Mimusops elengi, *Linn.*
Machilus glaucescens, *Wight*, syn. of Machilus macrantha, *N. ab.*, *E.*
Mada chettu, TEL., Avicennia tomentosa, *Linn.*
Madalam maram, TAM., Punica granatum, *Linn.*
Madanu or shan of Kanawar and Pangi, Salix alba, *Linn.*
Madar, HIND., Calotropis gigantea, *R: Br.* also Calotropis procera, *R. Br.*
Madatiya-gaha, SINGH., Adenanthera pavonina, *L.*
Maddee, TEL., Terminalia paniculata, *W. & A.*
Maddi chettu, TEL., Morinda tinctoria, *Roxb.* also Morinda citrifolia. *Linn.*,
Madelkhon of Dioscorides, Commiphora madagascarensis, *Lindl. Fl. Med.*
Madera del Brezil, SP., Cæsalpinia sappan, *Linn.*
Madhaka, SANS., Bassia latifolia, *Roxb.*
Madi, CAN., Terminalia tomentosa, *W. & A.*
Mad'hri, TAM., Timber.
Madolgas, SINGH., Garcinia echinocarpa, *Thw.*
Madu karray maram, TAM., Randia dumetorum, *Lam.*
Maella, SINGH., Olax zeylanica.
Magar bans, HIND., Bambusa arundinacea, *Willde.*
Mageer, MAHR., Odina wodier, *Roxb.*
Maghudam maram, TAM. Mimusops elengi, *Linn.*
Magul karanda, SINGH., Pongamia glabra, *Vent.*
Ma-gyi, BURM., Tamarindus indica, *Linn.*
Mahadan, SINGH., Calyptranthes cumini.
Maha-debara, SINGH., Zizyphus jujuba, *Willde.*
Maha limbo, URIA, Cedrela toona, *Roxb.*
Mahameda, TEL., Erythrina indica, *Lam.*
Maha nimba, BENG., Melia sempervirens, *Roxb.*
Maha nooga-gass, SINGH., Ficus indica, *Linn.*
Maha ratam bala, SINGH., Ixora parviflora, *Vahl.*
Maha-siambala, SINGH., Tamarindus indica, *Linn.*
Maha-takkada, SINGH., Scævola plumieri, *Vahl.*
Mahomedan tooth-brush tree, ENG., Salvadora indica, *Royle.*
Mahonia nepalensis, *DC.*, syn. of Berberis nepalensis, *Spr.*
Mahul of Kumaon, Pyrus variolosa, *Wall.*
Mahwa, HIND., Bassia latifolia, *Roxb.*
Mahwa, GUZ., Bassia longifolia, *Linn.*
Mahwal, HIND., Bauhinia vahlii, *W. & A.*
Maida chandna, HIND., Tetranthera roxburghii.
Maila, TAM., Vitex altissima, *Linn.*
Maiore of Tahiti, Artocarpus incisa, *Linn. fil.*
Mairthee, CAN., Terminalia coriacea, *W. & A.* also Terminalia tomentosa, *W. & A.*
Mairthee ? ? MAHR., Terminalia glabra, *W. & A.*
Maiva, BURM., Grewia, *Species.*
Majnun, PANJ., Salix tetrasperma, *Roxb.*
Makadoo chettu, TEL., Schrebera swietenioides, *Roxb.*
Makal, PANJ., Populus balsamifera, *Linn.*
Makandamu, SANS., Mangifera indica, *Linn.*
Makhur limbo, MAAR., Atalantia monophylla, *DC.*
Makkam, Tel. of the Nalla mallai, Schrebera swietenioides, *Roxb.*
Makooloo, SINGH., Hydnocarpus inebrians, *Vahl.*
Makse, AMB., Arenga saccharifera, *Labill*, the Hair.
Mal of Kanawar, Populus alba, *L.*
Malabar blackwood tree, Dalbergia latifolia, *Roxb.*
Malabar nut tree, ENG., Adhatoda vasica, *Nees.*

Malabar sago palm, ENG., Caryota urens, *Linn.*
Malaca, MALAY, Emblica officinalis, *Gœrtn.*
Malai caurai, TAM., Canthium nitens.
Malai konji maram, TAM., Cullenea excelsa.
Mal-ailas maram, TAM., Bombax malabaricum, *DC.*
Malai taynga, TAM., Sterculia foliis digitatis, *Ains.*
Malaka amrool, BENG., Eugenia malaccensis, *Linn.*
Malaka pela, MALEAL., Psidium pomiferum, *Linn.*
Malaviscus populneus, *Gœrtn.*, Thespesia populnea, *Lam.*
Mala-yaja, SANS., Santalum album, *Linn.*, *Roxb.*
Mal burute or flowered satinwood, SINGH., Chloroxylon swietenia, *Roxb.*
Maldung of PANJAB, Ulmus erosa ? also Ulmus pumila, also of Kanawar, Ulmus virgata, *Roxb.*
Malei averei, TAM., Inga xylocarpa, *DC.*, *W. & A.*
Mali elavu maram, TAM., Bombax malabaricum, *DC.*
Mali-jhun, TEL., Bauhinia racemosa, *Lam.*
Mali vampu, TAM., Melia azedarach, *Linn.*
Mal-kæra, SINGH., Ochna moonii, *Thw.*
Mal kangunee, MAHR., Celastrus montana, *Roxb.*
Malla, also kokni-ber, maraber, jhar-beri, zari, Hind. of Panjab, Zizyphus nummularia, *W. & A.*
Mal-naregam ? MALEAL., Atalantia monophylla, *DC.*
Malsuri of Panjab, Mimusops elengi, *Linn.*
Malu, TEL., Bauhinia racemosa, *Lam.*
Maluk, PANJAB, Diospyros lotus, *L.*
Malu-ramu chettu, TEL., Ægle marmelos, *Corr.*
Malvaregam, MALEAL., Atalantia monophylla, *DC.*
Ma maram, TAM., Mangifera indica, *Linn.*
Mamari, TEL., Mangifera indica, *Linn.*
Mambu, MALAY, Bambusa.
Mamidi chettu, TEL., Mangifera indica, *Linn.*
Mampalam, MAL., Mangifera indica, *Linn.*
Mana, MAHR., Lagerstrœmia parviflora, *Roxb.*
Mana of Trans-Indus, Pyrus malus, *Linn.*
Manabira, TEL., Hymenodyction excelsum, *Wall.*
Manchee jamudu, TEL., Euphorbia tiraculli, *Linn.*
Manda, TEL., Randia dumetorum, *Lam.*
Mandal of Kula, syn. of Acer caudatum, *Wallich.*
Mandala, PUSHTU, Amygdalus persica.
Manda motuku, TEL., Dalbergia oojeinensis, *Roxb.*
Mandar, PORT., Arenga saccharifera, *Labill.*
Mandar, CHENAB, RAVI, Acer creticum, *Linn.*
Mandarch, TAM., Bauhinia acuminata, *Linn.*, *Roxb.*
Mandata, TRANS-INDUS, Prunus armeniaca.
Mandel, RUS., Amygdalus communis, *Linn.*
Mandelu, GER., Amygdalus communis, *Linn.*
Mandloo of Kumaon, Randia dumetorum, *Lam.*
Mandorli, IT., Amygdalus communis, *Linn.*
Mancioga, BURM., Carallia lucida, *Roxb.*
Manga, TEL., Randia dumetorum, *Lam.*
Manggi-manggi ? MALAY, Rhizophora mucronata, *Lam.*
Mangifera axillaris, *Lam.*, syn. of Buchanania angustifolia, *Roxb.*
Mangifera glauca, *Rottl.*, syn. of Elæodendron glaucum, *Pers.*
Mangifera indica, *Linn.*, *Roxb.*, Mango tree.
Mangifera montana, *Heyne*, syn. of Mangifera indica, *Linn.*
Mangifera oppositifolia, *Roxb.*, syn. of Cambessedea oppositifolia, *W. & A.*
Mangifera pinnata, *Kœn.*, syn. of Spondias mangifera, *Pers.*
Mangium album, *Rumph*, syn. of Avicennia tomentosa, *Linn.*
Mangium caseolare, *Rumph*, syn. of Sonneratia acida, *Willde.*
Mango, ENG., Mangifera indica, *Linn.*
Mangostana morella, *Desrouss*, syn. of Hebradendron gambogioides.
Mangrove, ENG., Bruguiera rheedii, *L. Herit.*
Manil kara, MALEAL., Mimusops kauki, *Linn.*
Manilla tamarind, ENG., Inga dulcis, *Willde.*
Mani pungun, TAM., Sapindus rubiginosus, *Roxb.*
Manjadi, TAM., Adenanthera pavonina, *Linn.*
Manja kadamba, TAM., Nauclea cordifolia, *Roxb.*
Manjal varnam, TAM., Psidium pyriferum, *Linn.*
Manja pavattay, TAM., Morinda citrifolia, *Linn.*
Manja-pu maram, TAM., Nyctanthes arbor-tristis, *Linn.*
Manjati, MALEAL., Adenanthera pavonina, *Linn.*
Manje kadambe, TAM., Nauclea cordifolia, *Roxb.*
Manjinate, MALEAL., Morinda tomentosa, *Heyne.*
Manna hebracia, *D. Don.*, syn. of Alhagi maurorum, *Tourne.*
Mannu also Ka of Hazara, Ulmus campestris, *L.*
Manseni kotta, TEL., Adenanthera pavonina, *Linn.*
Manu, TEL., Timber Tree.
Manu, PANJAB, Ulmus erosa ? also U. pumila, *Pall.*
Manugah, SINGH., Ficus indica, *Linn.*, *Roxb.*
Manule of Kumaon, Randia dumetorum, *Lam.*
Manupala, TEL., Wrightia antidysenterica, *R. Br.* The bark.
Maoo-ka-doon, BURM., Nauclea cadamba, *Wall.*
Ma-oo let-tan, BURM., Nauclea undulata, *Wall.*
Mapat-kabellal, SINGH., Aporosa latifolia, *Thw.*
Ma-pat-kata-kala, SINGH., Briedelia moonii, *Thw.*
Mara CAN., MALEAL., Tree.
Mara, PANJABI, Euonymus fimbriata, *Wall.*
Maradu maram, TAM., Terminalia tomentosa, *W. & A.*
Maral, marali, PANJ., Mehan of Kulu, Ulmus campestris, *L.* also Ulmus erosa ? also U. pumila, *Pall.*
Maram, TAM., Tree, Timber.
Marari also Marar of Murree hills, Ulmus campestris, *L.*
Marazh, PANJAB, Ulmus campestris, *L.*
Mar chob of Persian and Pushtu, "Snake-stick." Staphylea emodi ?
Mardah, TAM., Terminalia paniculata, *W. & A.*
Mare, HIND., Caryota urens, *Linn.*
Maredu chettu, TEL., Ægle marmelos, *Corr.*
Margang, PANJ., Quercus dilatata, *Lindl.*
Marghand of Kanawar, Quercus dilatata, *Lindl.*
Margosa tree, ENG., Azadirachta indica, *Ad., Juss.*
Maridu, TEL., Cratæva nurvala, *Buch., Ham.*
Marithondi, SINGH., Lawsonia alba, *Lam.*
Marking nut tree, ENG., Semecarpus anacardium, *Linn.*
Maroodum tree, ANGLO-TAM., Terminalia alata, *Ainslie.*
Marre, TEL., Caryota urens, *Linn.*
Marri chettu, TEL., Ficus indica, *Linn.*
Martaban camphor wood, Laurus glandulifera ? ? *Wall.*
Maru, PANJ., Quercus dilatata, *Lindl.*
Maruk, MAHR., Ailantus excelsus, *Roxb.*
Marudum maram, TAM., Terminalia alata, *Ainslie.*
Maru karang, TAM., Randia dumetorum, *Lam.*
Marun, PANJ., Ulmus campestris, *L.*
Marutha, Tam, of Ceylon, Terminalia glabra.
Marwande, Pashtu of Waziristan, Vitex negundo, *L.*
Marwar, PANJAB, Bauhinia racemosa, *Lam.*

Ma[illegible], PORT., of Ceylon, Zizyphus jujuba, *Willde.*
Ma[illegible]bay of Moulmein, Bignonia stipulata, *Roxb.*
Mas mora gaha, SINGH., Adenanthera bicolor, *Moon.*
Masne, PANJAB, Pistacia integerrima, *H. f. & Th.*
Mast tree, ENG., Guatteria longifolia, *Wall.*, *W. & A.*
Mathirshi, PANJ., Albizzia lebbek, *Benth.*
Matti pal of the Kader, Ailantus malabaricus, *DC.*
Maul of Chenab, Pyrus kumaonensis.
Maumea asiastica, *Linn.*, Barringtonia speciosa.
Maura, PUSTHU, Pyrus malus, *Linn.*
Mava, MALEAL., Mangifera indica, *Linn.*
Mavalinga maram, TAM., Caillea cinerea.
Mava-linga maram, TAM., Schrebera swietenioides, *Roxb.*
Mavilinga maram, TAM., Cratæva roxburghii, *R. Br.*
Mavalingum, TAM., Cratæva nurvala, *Buch.*, *Ham.*
Mavena, CAN., Mangifera indica, *Linn.*
Mavi, TEL., Mangifera indica, *Linn.*
Mawa, also marwa of Salt Range, Vitex negundo, *Linn.*
Mawil ghila, HIND., Bauhinia racemosa, *Lam.*
Mayan, BURM., Mangifera oppositifolia.
Mayharie, SANS., Cassia auriculata.
Mayi, TEL., Schleichera trijuga, *Willd.*
Mayugadi maram, TAM., Mimusops elengi, *Linn.*
May-za-lee, BURM., also Mazalee, BURM., Cassia florida, *Vahl.*
Mazer wood tree, ENG., Isonandra gutta, *Hook.*
Mea, CAN., Caryota urens, *Linn.*
Medi chettu, TEL., Ficus glomerata, *Roxb.*
Mee, SINGH., Bassia longifolia, *Linn.*
Mee-an (buffalo horn) Milila, SINGH., Vitex altissima, *Linn.*
Meean milile, SINGH., Vitex trifolia, *Linn.*
Meemini mara, SINGH., Pithecolobium subcoriaceum, *Thw.*
Meeyan mililla-gass, SINGH., Vitex altissima, *Linn.*
Melaraneia, IT., Citrus aurantium, *Linn.*
Meleaca wightiana, *Wall.*, syn. of Amoora rohituka, *W. & A.*
Melia azadirachta, *Linn.*, syn. of Azadirachta indica, *Ad. Juss.*
Melia bukayun, *Royle*, syn. of Melia sempervirens, *Roxb.*
Melia composita, *Willde*, syn. of Melia azedarach, *Linn.*
Melia sempervirens, *Swartz*, syn. of Melia azedarach, *Linn.*
Melia superba, *Roxb.* syn. of Melia composita, *Willde.*
Melicocca pubescens, *DC.*, syn. of Schleichera trijuga, *Willd.*
Melicocca trijuga, *Juss.*, syn. of Schleichera trijuga, *Willd.*
Mel-ilow, MALEAL., Vitex alata, *Roxb.*
Melle, SINGH., Olax zeylanica.
Melindi, HIND., Lawsonia alba, *Lam.*
Memecylon ramiflorum, *Lam.* syn. of Memecylon tinctorium, *Kæn.*, *W. & A.*
Mendora, SINGH., Isauxis roxburghiana, *Wight.*
Mentus, MALEAL., Cassia fistula, *Linn.*
Μυραβαλανος εμβλικα, GREEK, Emblica officinalis, *Gærtn.*
Mer-singi, MAHR., Spathodea arcuata, *W. Ic.*
Meru, PANJAB, Ulmus erosa? also U. pumila, *Pall.*
Mespilus japonicus, *Thunb.*, syn. of Eriobotrya japonica, *Lindley.*
Mesua nagaha, *Gard.* syn. of Mesua ferrea, *Linn.*
Meteorus coccineus, *Lour.*, syn. of Barringtonia acutangula, *Gært.*
Mha-ghai, BURM., Elæocarpus, *Species.*
Mhan bin, BURM., Morinda bracteata. *Roxb.* also Morinda exserta, *Roxb.*
Microcos tomentosa, *Sm.*, Grewia paniculata, *Roxb.*
Microelus roeperianus, *W. & A.*, syn. of Bischofia roeperianus, *Blume*, *W. Ic.*
Milila-gaha, SINGH., Vitex altissima, *Linn.*
Milk bush, ENG., also Milk hedge, ENG., Euphorbia tiraculli, *Linn.*
Mililla-gass, SINGH., Vitex altisssima, *Linn.*
Mimasko, BURM., Rottlera, *Species.*
Mimosa alba, *Rottl.*, syn. Acacia leucophlœa, *Willd.*
Mimosa amara, *Roxb.* Albizzia amara, *Boiv.*
Mimosa arabica, *Roxb.*, syn. Acacia arabica, *Willd*
Mimosa bigemina, *Linn.*, syn. Inga bigemina, *Willd*
Mimosa biglobosa, *Roxb.*, syn. of Parkia roxburghii, *G. Don.*
Mimosa cæsia, *Linn.*, syn. of Acacia cæsia, *W. & A.*
Mimosa catechnoides, *Wall.*, syn. of Acacia catechu, *Willd.*
Mimosa catechu, *Linn.*, syn. Acacia catechu, *Willd.*
Mimosa cinerea, *Linn.*, syn. of Caillea cinerea.
Mimosa cinerea, *Linn.*, syn. of Dichrostachys cinerea, *W. & A.*
Mimosa coringera, *Linn.*, Acacia latronum, *Willde.*
Mimosa dulcis, *Roxb.* syn. of Inga dulcis, *Willde.*
Mimosa elata, *Roxb.*, *Wall.*, syn. of Albizzia elata.
Mimosa farnesiana, *Willd*, syn. of Acacia farnesiana, *Willd.*
Mimosa farnesiana, *Roxb.* syn. of Vachellia farnesiania, *W. & A.*
Mimosa ferruginea, *Roxb.*, syn. of Acacia ferruginea, *DC.*
Mimosa flexuosa, *Rottl*, syn. of Albizzia lebbek, *Benth.*
Mimosa indica, *Poir*, Acacia farnesiana, *Willd.*, syn. of Vachellia farnesiana.
Mimosa kleinii, *Poir*, syn. of Acacia tomentosa, *Willd.*
Mimosa latronum, *Koen*, Acacia latronum, *Willd.*
Mimosa leucophlæa, *Roxb.*, syn. of Acacia leucophlæa, *Willd.*
Mimosa lucida, *Roxb.* syn. of Inga bigemina, *Willde.*
Mimosa marginata, *Lam.*, syn. of Albizzia odoratissima, *Benth.*
Mimosa microphylla, *Roxb.*, syn. of Acacia myriophylla, *Willd.*
Mimosa nilotica, *Linn.*, syn. of Acacia vera, *Bauh.*
Mimosa odoratissima, *Linn.*, syn of Albizzia odoratissima, *Benth.*
Mimosa pedunculata, *Roxb.*, syn. of Parkia biglandulosa, *W. & A.*
Mimosa procera, *Roxb.*, syn. of Albizzia procera, *Benth.*
Mimosa pulchella, *Roxb.*, syn. of Albizzia amara, *Boivin.*
Mimosa sirissa, *Roxb.*, syn. of Acacia sirissa? Albizzia lebbek, *Benth.*
Mimosa speciosa, *Jacq.*? syn. of Acacia sirissa? *Buch.*
Mimosa speciosa, *Jacq.*, syn. of Albizzia lebbek *Benth.*
Mimosa stipulacea, *Roxb.*, syn. of Albizzia stipulata, *Boiv.*
Mimosa stipulata, *Roxb.*, syn. of Albizzia stipulata, *Boiv.*

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Mimosa suma, *Roxb.*, syn. of Acacia suma, *Buch.*
Mimosa sundra, *Roxb.*, syn. of Acacia sundra, *DC.*
Mimosa tomentosa, *Roxb.*, syn. of Acacia tomentosa,
Mimosa tomentosa, syn. of Acacia leucophlæa,
Mimosa xylocarpa, *Roxb.* syn. of Inga xylocarpa, *DC.*
Mimusops dissectus, *Spreng*, syn. of Mimusops kauki, *Linn.*
Mimusops hexandra, *Roxb.*, syn. of Mimusops kauki, *Linn.*
Mimusops kauki ? Kheerokolee, Uria.
Mindhal, Panjabi, Randia dumetorum, *Lam.*
Miniley, Port., Katamanak.
Minjulu, Can., Mimusops elengi, *Linn.*
Mirandu of Kangra, Dodonæa burmanniana, *DC.*
Mirandu of Panjab, Elæodendron roxburghii, *W. & A.*
Mirri of Panji, Pinus gerardiana, *Wall.*
Miswak, Pers., Salvadora indica, *Royle.*
Mitha kamaranga, Duk., Averrhoa carambola, *Linn.*
Mitha-tendu, Panjab. Diospyros tomentosa, *Roxb.*
Mithivan, Panj., Salvadora oleoides, *Dne.*
Mi-thwa, Burm., Charcoal.
Moal of Sylhet, Vateria lanceæfolia, *Roxb.*
Mochayet of Forskal, syn. of Cordia myxa, *Linn.*
Modira kaniram, Maleal., also Modira canoram, of *Rheede*, Strychnos colubrina *Linn.*
Moduga, Tel., Erythrina suberosa, *Roxb.*
Moduga chettu, Tel., Butea frondosa, *Roxb.*
Moduga vriksha, Can., Erythrina indica, *Lam.*
Moga maram, Tam., Schrebera swietenioides, *Roxb.*
Mogilli, Tel. of Circars, Morinda exserta, *Roxb.*
Moha, Hind., Mahr., Honge, Can.
Mohe-ka jhar, Hind., Bassia longifolia, *Linn.*
Moh-ma-gab, Burm., Galex, *Species.*
Moho, Mahr., Bassia latifolia, *Roxb.*
Mohru, Panjabi, Quercus dilatata, *Lindl.*
Mohru, Panj., Quercus incana.
Mohu, Beng., Bassia latifolia, *Roxb.*
Moka yapa, Tel., Stereospermum chelonoides, *W. Ic.*
Molabra, Singh., Rottlera oppositifolia, *Blume.*
Molucca tree, Eng., Aleurites triloba, *Forst.*
Mo-ma-kha, Burm., Salix tetrasperma, *Roxb.*
Mom china, Beng., Stillingia sebifera, *Willde.*
Monchons, Macass., Arenga saccharifera, *Labill.*
Monkey bread tree, Eng., Adansonia digitata, *L.*
Monkey-faced tree, Eng., Rottlera tinctoria, *Roxb.*
Monocera munronii, *Wight*, syn. of Monocera glandulifera, *Hooker.*
Moediya gaha, Singh., Hunteria zeylanica, *Gard.*
Moochoo maram, Erythrina indica, *Lam.*
Moochy wood tree, Eng., Erythrina indica, *Lam.*
Moodilla, Singh., Barringtonia speciosa, *Linn.*
Mookooroo karra, Tel., Cordia myxa, *Linn.*
Moona mal, Singh, Mimusops elengi, *Linn.*
Moone mal-gass, Singh., Mimusops elengi, *Linn.*
Mootr mara, Can., Butea frondosa, *Roxb.*
Moræda, Tam., Buchanania latifolia, *Roxb.*
Mora-gaha, Singh., Nephelium longan, *Camb.*
Morali chettu, Tel., Sponia orientalis, *Voigt.*
Moreton bay chestnut, Eng., Castanospermum australe.
Mori of Sylhet, Euonymus garcinifolia, *Roxb.*
Morinda mudia, *Ham.*, Morinda tomentosa, *Heyne.*
Moroeda, Tam., Boswellia glabra, *Roxb.*
Morun, Panjab, Ulmus erosa ? also U. pumila, *Pall.*
Morus papyrifera, *Linn.*, syn. of Broussonetia papyrifera, *Vent.*
Mota bondara, Mahr., Lagerstrœmia reginæ,
Motaga, Tam., Erythrina suberosa, *Roxb.*
Moulvisia rubiginosa, *G. Don.*, syn. of Sapindus rubiginosus, *Roxb.*
Mountain ebony, Eng., Bauhinia acuminata, *Linn.*, also Bauhinia variegata, *Linn.*
Mountain jack, Eng., Artocarpus echinata, *Roxb.*
Movi chettu, Tel., Eugenia alternifolia, *Roxb.*
Moyi chettu, Tel., Eugenia alternifolia, *Roxb.*
Mudde doop, Can., Ailantus malabaricus, *DC.*
Muddi, Can., Terminalia coriacea, *W. & A.*
Muddi chettu, Tel., Terminalia alata, *Ainslie.*
Mududa, Tam., Chloroxylon swietenia, *Roxb.*
Muduga Tel., Butea frondosa, *Roxb.*
Muen-phal ka-jhar, Hind., Randia dumetorum, *Lam.*
Mug, Beng., Stereospermum suaveolens, *W. Ic.*
Mugali mara, Can., Mimusops elengi, *Linn.*
Muha, Hind., Bassia latifolia, *Roxb.*
Mukampala, Maleal., Alstonia scholaris, *R. Br.*
Mukodi, Tel., Schrebera swietenioides, *Roxb.*
Mula-buraka manu, Tel., Bombax malabaricum, *DC.*
Mulberry of Mehra forest, Hazara, Morus, *Sp.*
Mul-elavu, Maleal., Bombax malabaricum, *DC.*
Mulili maram, Tam., Guatteria cerasoides, *Duval.*
Mulia, Maleal., Xanthoxylon rhetsa, *Roxb.*
Mulla vengay maram, Tam., Briedelia spinosa, *Willde.*
Mullu moduga, Tel., Erythrina sublobata, *Roxb.*
Mullu vangay, Maleal., Briedelia spinosa, *Willde.*
Mulsari, Duk., Mimusops elengi, *Linn.*
Mulu-elavu, Maleal., Bombax malabaricum, *DC.*
Mulugu chettu, Tel., Morinda citrifolia, *Linn.*, also Morinda tinctoria, *Roxb.*
Muluku, murukku, Tam., Erythrina indica, *Lam.*
Mumannai, Pushtu, Sageretia, *Sp.*
Mundara, Sans., Erythrina indica, *Lam.*
Mundiri maram, Tam., Anacardium occidentale, *Linn.*
Mungil, Tam., Bambusa arundinacea, *Willde.*
Muni, Tam., Tel., Erythrina suberosa, *Roxb.*
Muni gangaravi, Tam., Thespesia populnea, *Lam.*
Muni ver, Tam., Premna integrifolia, *Roxb.*
Munnay maram, Tam., Premna integrifolia, *Roxb.*
Munni kiray, Tam., Premna integrifolia, *Roxb.*
Munroo of Kumaon, Quercus incana.
Muntajiluga mokha, Tel., Sesbania paludosa, *Roxb.*
Munta mamidi chettu, Tel., Anacardium occidentale, *Linn.*
Muql, Pers., Commiphora madagascarensis, *Lindl. Fl. Med.*
Murchola in Kumaon, Murraya exotica, *Linn.*
Murra vuttay maram, Tam., Hydnocarpus inebrians, *Vahl.*
Murraya konigii, *Spreng*, syn. of Bergera konigii, *Linn.*
Murre manga maram, Tam., Spondias mangifera, *Pers.*
Murukka maram, Tam., Erythrina indica, *Lam.*
Muruta-gass, Singh., Lagerstrœmia reginæ, *Roxb.*
Murutu-gaha, Singh., Lagerstrœmia reginæ, *Roxb.*
Musada, Tel., Strychnos nux vomica, *Linn.*
Mushti, Tel., also Mushti ganga musidi, Tel., Strychnos nux vomica, *Linn.*
Musi, Tel., Alphonsea lutea, *H. f. & T.*

[illegible], Tel., Strychnos nux vomica, *Linn.*
[illegible], Panjab, Hamiltonia suaveolens, *Roxb.*
Mustard tree of Scripture, Salvadora persica, *Linn.*
Muta kurmul, Duk., Dillenia speciosa, *Thunb.*
Mutte, Can., Terminalia tomentosa, *W. & A.* also Terminalia coriacea, *W. & A.*
Muvi, Tel., Alphonsea lutea, *H. f. & T.*
Muvvi, Tel., Alphonsea lutea, *H. f. & T.*
Myat ya, Burm., Grewia floribunda, *Wall.*
Myauk sook, Burm., Artocarpus, *Species.*
Mya ya, Burm., Grewia microcos, *Linn.*, *W. Ill.*
Mya ya gyee, Burm., Grewia floribunda, *Wall.*
Myda lakri, Hind., Tetranthera, *Sp.*
Myn, Hind., Randia dumetorum, *Lam.*
Myauk-gnau, Burm., Duabanga grandiflora, *Wall.*
My-ouk-loke, Burm., Artocarpus lakoocha, *Roxb.*
My-ouk-louk, Burm., Artocarpus lakoocha, *Roxb.*, *W. Ic.*
Myouk-kyau, Burm., Blackwellia tomentosa, *Vent.*
Myouk kyan, Burm., Homalium tomentosum.
Myrica acris, *DC.*, syn. of Eugenia acris, *W. & A.*
Myrtus bracteata, *Willde*, syn. of Eugenia bracteata, *Roxb.*
Myrica pimentoides, *DC.*, syn. of Eugenia acris, *W. & A.*
Myrobalanus bellerica ? syn. of Terminalia belerica, *Roxb.*
Myrobalanus citrina, *Gœrtn.*, syn. of Terminalia citrina, *Roxb.*
Myrobalanus emblica, *Bauhin.*, syn. of Emblica officinalis, *Gœrtn.*
Myrtus caryophyllus, *Spreng*, syn. of Eugenia caryophyllata, *Thun.*
Myrtus coromandeliana, *Kœn.*, syn. of Eugenia bracteata, *Roxb.*
Myrtus cumini, *Linn.*, syn. of Eugenia jambolana, *Lam.*
Myrtus heynei, *Spreng*, syn. of Eugenia bracteata, *Roxb.*
Myrtus latifolia, *Heyne.*, syn. of Eugenia bracteata, *Roxb.*
Myrtus littoralis, *Roxb.* in E. I. C. Mus., Eugenia bracteata, *Roxb.*
Myrtus pimenta, *Linn.*, var. latifolia, *Roxb.*, syn. of Eugenia acris, *W. & A.*
Myrtus ruscifolia, *Willde*, syn. of Eugenia bracteata, *Roxb.*, *W. & A.*
Mysore thorn, Eng., Cæsalpinia sepiaria, *Roxb.*

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Na bai, Burm., also Na-bhay, Burm., Odina wodier, *Roxb.*
Nadoong-gass, Singh., Dalbergia mooniana, *Thw.*
Na-gaha, Singh., Mesua ferrea, *Linn.*
Naga kesara chettu, Tel., Mesua ferrea, *Linn.*
Nagal ? Premna tomentosa, *Willde.*
Nagara chettu, Tel., Premna tomentosa, *Willde.*
Naga musadi, Tel., Strychnos colubrina, *Linn.*
Naga tumma, Tel., Vachellia farnesiana, *W. & A.*,
Naga valli, Sans., Canthium parviflorum, *Lam.*
Nag champa, Mahr., Mesua ferrea, *Linn.*, *DC.*
Nagdaon, Staphylea emodi.
Nagee, Burm., Pterospermum acerifolium, *Willde.*
Nageria putranjiva, *Roxb.*, syn. of Putranjiva roxburghii, *Wall.*
Nagin koora, Can., Tabernæmontana dichotoma, *Roxb.*
Nagkesar, Hind., Nag-keshur, Beng., Mesua ferrea, *Linn.*
Nagool, Tel., Premna tomentosa, *Willde.*
Nagranga, Sans., Citrus aurantium, *Linn.*
Naja balli, Maleal., Bauhinia scandens, *Linn.*
Nak or Nakh, Pyrus communis.
Nakka neredu, Tel., Flacourtia sapida, *Roxb.*
Nakka-renu, Tel., Artocarpus lakoocha, *Roxb.*
Nakkera, Tel., also Nakkeru, Tel., also Nakkeru wood tree, Anglo-Tel., Cordia myxa, *Linn.*
Nakl, Beng., Tree.
Nali, Tel. of Nalla Mallai, Ulmus integrifolia, *Roxb.*
Nali kera, Sans., Cocos nucifera, *Linn.*
Nalla chandro, Tel., Acacia sundra, *DC.*
Nalla dudugu, Tel., Uvaria tomentosa, *Roxb.*
Nalla irugudu, Tel., Dalbergia latifolia, *Roxb.*
Nalla jidi chettu, Tel., Semecarpus anacardium, *Linn.*
Nalla mada, Tel., Avicennia tomentosa, *Linn.*
Nalla maddi chettu, Tel., Terminalia tomentosa, *W. & A.*, also Terminalia glabra, *W. & A.*
Nalla manga, Tel. of Circars, Randia, *Species.*
Nalla muddee, Tel., Maba buxifolia, *Pers.*
Nalla regoo, Tel., Canthium didymum, *Gœrt.*
Nalla regu, Tel., Albizzia amara, *Boivin.*
Nalla tumi karra, Tel., Ebony.
Nalla-tumma, Tel., Acacia arabica, *Willd.*
Nalla vavali, Tll., Vitex negundo, *Linn.*
Nalla ulimera, Tel., Diospyros chloroxylon, *Roxb.*
Nalla urimida, Tel., Diospyros cordifolia, *Roxb.*
Nalla yirugudu, Tel., Dalbergia latifolia, *Roxb.*
Nalli, Tel., Ulmus integrifolia, *Roxb. Cor. Pl.*
Nama, Amb., Arenga saccharifera, *Labill.*
Namball paio, Maleal., Eugenia malaccensis, *Linn.*
Namille, Tel. of Nalla mallai, Ulmus integrifolia, *Roxb.*
Nanah, Mahr., Lagerstrœmia macrocarpa, *Roxb.*
Nandu wood, Anglo-Singh., Fissicalyx, *Bentham.*
Nang, Panj., Cornus macrophylla, *Wall.*
Nang-ka, Malay, Artocarpus incisa, *Linn. fil.*, Jack wood, Eng.
Nang-put, Hind., Bauhinia anguina, *Roxb.*
Nanjunda maram, Tam., also Nanjunda wood tree, Anglo-Tam., Balanites ægyptiaca, *Delile.*
Nan-lung-kyen, Burm., Acacia arabica, *Willd.*
Nannu, Mahr., Lagerstrœmia reginæ, *Roxb.*
Nan-tar-uk, Burm., Liquidambar altingia, *Blume.*
Naooru, Tel., Premna tomentosa, *Willde*, *Roxb.*
Nara bothu, Tel., Eriolæna hookeriana, *W. & A.*
Nara chettu, Tel., Tetanthera, *Sp.*
Naradidi vriksha, Can., Eugenia caryophyllifolia, *Roxb.*
Nara epe, Tel., Hardwickia binata, *Roxb.*
Naraga maram, Tam., Ehretia ovalifolia, *W. Ic.*
Narang, Arab., also Naranj, Arab., Pers., Citrus aurantium, *Linn.*
Naranjas, Sp., Citrus aurantium, *Linn.*
Narel-ka jhar, Hind., Cocos nucifera, *Linn.*
Nargil, Maleal., the nut of Cocos nucifera, *Linn.*
Nargilli, Ar., the palm wine of Cocos nucifera,
Narikaylum, Sans., oil of Cocos nucifera, *Linn.*
Narikel Beng., Narikela, Sans., Nari-kera, Sans., Cocos nucifera, *Linn.*

Nar[illegible]uz., The nut Narilli, Duk., the palm wine of Cocos nucifera.
Naringi, Hind., Citrus aurantium, *Linn.*
Nareli, Panj., Tamarix orientalis, *L.*
Narlingi, Tam., Albizzia amara, *Boivin.*
Narrow-leaved sepistan, Eng., Cordia angustifolia, *Roxb.*
Narti of Annatom Island, Santalum album, *Linn.*
Narul, Guz., Cocos nucifera, *Linn.*, The nut.
Naruvalli, Tam., Cordia angustifolia, *Roxb.*, also Cordia obliqua, *Willd.*
Narvala, Can., Tam., Cratæva roxburghii, *R. Br.*
Narvilli marum, Tam., Cordia rothii, *Ræm & Sch.*
Naryepa, Tel., Hardwickia binata, *Roxb.*
Na-sa-phiu, Burm., Pterocarpus santalinus, *Linn.*
Nas bans, Hind., Bambusa arundinacea, *Willde.*
Nasha, Burm., Phyllanthus, *Species.*
Nashtar, Pers., Pushtu, Cedrus deodara, *Loud.*
Nashtar or Nakhtar, Panj., Pinus longifolia, *Lamb.*
Naspati, Hind., Pyrus communis.
Nassau of New Hebrides, Santalum album, *Linn.*
Nastus strictus, Sm., syn. of Bambusa stricta, *Roxb.*
Nastus arundinaceus, Sm., syn. of Bambusa arundinaceus, *Willde.*
Nath'h, Duk., Timber.
Nathur, Guz., Canes.
Nattu vadom maram, Tam., Terminalia cattappa, *Linn.*
Nauclea cordata, *Roxb.*, syn. of Nauclea coadunata, *Roxb.*
Nauclea orientalis, *Gærtn.*, syn. of Nauclea parvifolia, *Roxb.*
Nauclea parviflora, Pers., syn. of Nauclea parvifolia, *Roxb.*
Naum papula, Tel., Canthium didymum. *Gært.*
Nauru, Tel., Premna tomentosa, *Willde.*
Naurei, Tam., Eugenia caryophyllifolia, *Roxb.*
Navara, Tel., Ulmus integrifolia, *Roxb.*
Navili, Tel., of Nalla malla, Ulmus integrifolia, *Roxb.*
Navuru, Tel., Premna tomentosa, *Willde.*
Naw, Singh., Iron wood.
Nawa, Amb., Arenga saccharifera, *Labill.*
Nawel busi eragu, Tel., Vitex arborea, *Roxb.*
Nawell maram, Tam., Eugenia jambolana, *Lam.*, also Eugenia caryophyllifolia, *Roxb.*
Nebissi, Tanna Islands, Santalum album, *Linn.*
Nedun, Singh., Dalbergia lanceolaria, *Linn. fil.*
Neembara Mahr., Melia composita, *Willde.*
Neerangi, Can., Poinciana elata, *Linn.*
Neer kuddembay maram, Tam., Nauclea parvifolia, *Roxb.*
Neghka, Maleal., Tamarindus indica, *Linn.*
Nekki bekkar, Panjab, Grewia rothii, *DC.*
N-la jami, Tel., Acacia cineraria, *Willd.*
Nelkar, Panjab, Dalbergia sissoo, *Roxb.*
Nellajidi, Tel., Semecarpus anacardium, *Linn.*
Nella Kalavalu, Tel., Honge, Can.
Nella-renga, ?,? Albizzia amara, *Boivin.*
Nelli chettu, Tel., Premna latifolia, *Roxb.*
Nelli-gass, Singh., Phyllanthus emblica, *Linn.*
Nellikai, Tam., Emblica officinalis, *Gærtn.*
Nelli mara, Can., Nelli maram, Tam., Emblica officinalis, *Gærtn.*
Nemmi chettu, Tel., Dalbergia oojeinensis, *Roxb.*
Nendoon, Singh., Dalbergia lanceolaria, *Linn. f.*
Neoza, Hind. in Kumaon, Neoza or chilgoza of China. Pinus gerardina.
Neoza chilghoza, Elphin, syn. of Pinus gerardiana, *Wall.*
Nepera, Singh., the wood of Caryota urens *Linn.*
Nera, Malay, Borassus flabelliformis, *Linn.*
Neradi, Tel., Eugenia jambolana, *Lam.*, *Roxb.*
Nerasi, Tel., Elæodendron roxburghii, *W. & A.*
Neredi Tel., also Neredu chettu, Tel., also Neredu manu, Tel., Eugenia caryophyllifolia, *Roxb.*
Nergundi, Beng., Vitex negundo, *Linn.*
Nerija dichotoma, *Roxb.*, syn. of Elæodendron roxburghii, *W. & A.*
Nerium antidysentericum, *Linn.*, syn. of Wrightia antidysenterica, *R. Br.*
Nerium coccineum, *Roxb.*, syn. of Wrightia coccinea, *Sims.*
Nerium indicum, *Mill.* also N. odorum, *Ait.*, Nerium oleander, *Lour.*, syn. of Nerium odoratum, *Lam.*
Nerium tinctorium, *Roxb.*, syn. of Wrightia tinctoria, *R. Brown.*
Nerium tomentosum, *Roxb.*, syn. of Wrightia tomentosa, *R. & Sch.*
Netavil maram, Tam., Antiaris innoxia, *Blume.*
Nettle tree, Eng., Celtis caucasica, *Willde.*
Ne-ur, in Kotgarh, Cupressus torulosa, *Don.*
Neval adugu manu, Tel., Vitex arborea, *Roxb.*
Neva-ledi, Tel., Vitex leucoxylon, *Roxb.*
New Zealand teak, Eng., Vitex littoralis.
Neya dasse-gass, Singh., Eurya japonica, *Thunb.*
Naga thiu-gyee, Burm., Ficus cordifolia.
Ngoo-tha, Burm., Cassia, *Species.*
Niat of Annatom Island, Santalum album, *Linn.*
Niato, Malay, Isonandra gutta, *Hook.*
Nibong, Malay., Caryota urens, *Linn.*
Nico-chaka, Sans., Alangium lamarkii, *Thwaites.*
Nigali, Panj., Arundinaria utilis.
Niggi, Panjab, Hamiltonia suaveolens, *Roxb*
Nilike-mara, Can., Emblica officinalis, *Gærtn.*
Nim, Beng., Azadirachta indica, *Ad. Juss.*
Nim, Hind., Mahr., Azadirachta indica, *Ad. Juss.*
Nim, Hind., Mahr., Melia azedarach. *Linn.*
Nimba, Tel., Azadirachta indica, *Ad. Juss.*
Nimbamu, Tel., Azadirachta indica, *Ad. Juss.*
Nirmuli, Hind., Strychnos potatorum, *L.*
Nirarlay, Tam., Eugenia jambolana, *Lam.*
Nirgunda, Duk., Vitex trifolia, *Linn.*
Nirija, Tel., Elæodendron roxburghii, *W. & A.*
Nirmali, Beng., Hind., Mahr., Strychnos potatorum.
Nirmul, Hind., Strychnos potatorum, *L. Willde.*
Nir nochi, Tam., Vitex trifolia, *Linn.*
Nir pongilam, Maleal., Spathodea rheedii, *Spreng.*
Niru jilugu, Tel., Æschynomene aspera, *Lam.*
Niru prabba, Tel., Calamus rotang, *Linn.*
Nir vala, Maleal., Cratæva nurvala, *Buch., Ham.*
Nishinda, Beng., Vitex negundo, *Linn.*, also Hind., Vitex trifolia, *Linn.*
Nisinda Hind., Vitex negundo, *Linn.*, also V. trifolia, *Linn.*
Niu of Sutlej, Alnus, *Sp.*
Noas kool, Can., Buchanania latifolia, *Roxb.*
Nædun, Singh., fissicalyx, *Bentham.*
Nærala mara, Can., Eugenia jambolana, *Lam.*
Nolai Talai maram, Tam., Antidesma bunias, *Spreng.*
Nolika chettu, Tel., Pterospermum heyneanum, *Wall.*
Noli tali maram, Tam., Antidesma alexiteria.
Noli Tali, Maleal., Antidesma bunias, *Spreng.*

Nongonah, Uria., Conocarpus latifolia, *Roxb.*
Nonna maram, Tam., Morinda citrifolia, *Linn.*
Nevo of Nepal, Euonymus garcinifolia, *Roxb.*
Noondo-monde, Uria., Nauclea parvifolia, *Roxb.*
Narne, Burm. of Tavoy, Castanea martabanica.
Nowlee, Tel., Ulmus integrifolia, *Roxb.*
Nowlee eragu, Tel. Vitex arborea, *Roxb.*
Nuch, Panjab, Fraxinus xanthoxylloides.
Nukkeru, Tel., Cordia angustifolia, *Roxb.*
Nulla kaka mushti, Tel., Diospyros sylvatica, *Roxb.*
Nulla-ulemara wood, Anglo-Tel., Diospyros chloroxylon, *Roxb.*
Nulæli maram, Tam., Guatteria cerasoides, *Dunal.*
Nulshima, Nep., Ehretia serrata, *Roxb.*
Nuna maram, Tam., Morinda citrifolia, *Linn.*
Numbar, Panj., Acacia leucophlœa, *Willd.*
Nundi muna, Mahr., Lagerstrœmia parviflora, *Roxb.*
Nunjoonda maram, Tam., Gardenia turgida, *Roxb.*
Nur, Jav., Cocos nucifera, *Linn.*
Nur miniak, Malay, oil of Cocos nucifera, *Linn.*
Nux-vomica tree, Eng., Strychnos nux vomica, *L.*
Nya, Burm., Morinda exserta, *Roxb.*
Nyaung-lan, Burm., Shorea, *Species.*
Nyu, Kanawar, Alnus nepalensis.

O

Oak, Eng., Quercus incana.
Ochna zeylanica, *Lam.*, syn. of Gomphia angustifolia, *Vahl., W. & A.*
Oda sale, Tel., Vacbellia farnesiana, *W. & A.*
Oepata, Maleal., Avicennia tomentosa, *Linn.*
Ohia-ai of Sandwich Islands, Eugenia malaccensis, *Linn.*
Oi, or ohi of Kangra, Albizzia stipulata, *Boiv.*
Oka, Tel., Areca catechu, *Linn.*
Ola of Panjab, Albizzia stipulata. *Boiv.*
Olchi, or Aor of Kangra, Prunus domestica, *Linn.*
Olea ferruginea, *Royle*, syn. of Olea europæa, *L.*
Olive, Eng., Olea europæa, *L.*
Ononis spinosa, *Hasselq.*, syn. of Alhagi maurorum, *Tourne.*
Ooday maram, Tam., Odina wodier, *Roxb.*
Oodoga maram of Wynaad, Bassia longifolia, *Linn.*
Oogoorassa, Singh., Flacourtia sapida, *Roxb.*
Ooloonanthri mara, Can., Stereospermum suaveolens, *W. Ic.*
Oombur, Duk., Ficus glomerata, *Roxb.*
Oonara mara, Can., Tamarindus indica, *Linn.*
Oondi, Mahr., Calophyllum, *Species.*
Oonoonoo-gass, Singh., Pygeum wightianum, *Blume.*
Oonum, Hind., Pinus webbiana *Wall. & Lamb.*
Opposite-leaved mango, Eng., Cambessedea oppositifolia.
Oopupoma, Beng., Qu. uppu ponna, Rhizophora mucronata, *Lam.*
Ooroopa, Mal., Hopea decandra, *Buch.*
Oosarika, Tel., Phyllanthus emblica, *Linn.*
Ootali panna, Tam., Caryota urens, *Linn.*
Ootradi ke munke, Duk., Elæocarpus lanceæfolius, *Roxb.*
Oranges, Fr., Orangen, Dut., Orange tree, Eng., Orange wood tree, Eng., Citrus aurantium, *Linn.*
Orchaka, Beng., Sonneratia acida, *Willde.*
Oreodoxa oleracea, *Endl.*, syn. of Areca oleracea, *Linn.*
Oriental plane, Eng., Platanus orientalis, *Linn.*
Ornitrophe serrata, *Roxb.*, syn. of Schmidelia serrata, *DC.*
Orophea heyneana, *H. f. et T.*, syn. of Mitrephora heyneana, *Blume.*
Oruk of Sylhet, Machilus macrantha, *N. ab E.*
Osyris peltata, *Roxb., W. Ic.*, syn. of Macaranga roxburghii, *Wall., W. Ic.*
Otaheiti apple tree, Eng., Spondias dulcis, *Forst.*
Otthe, Singh., Rottlera digyna, *Thwaites.*
Ouk-chin-ya, Burm., Diospyros melanoxylon, *Roxb.*
Ouk-khyin-za, Burm., Diospyros, *Species.*
Ouk-sheet, Burm., Ægle marmelos, *Corr.*
Oval-leaved fig tree, Eng., Ficus benjamina, *Linn.*

P

Pabba, Mahr., Chickrassia tabularis, *Ad. Juss.*
Pabe also Chanun of Chenab, Populus ciliata, *Wall.*
Pachcha manu, Tel., Conocarpus acuminatus, *Roxb.*
Pacha, Paja, also paddam, Beas and Sutlej, Prunus puddum, *Lindley.*
Pachchari, Tel., Dalbergia paniculata, *Roxb.*
Pachimanu, Tel., Conocarpus acuminatus, *Roxb.*
Pachonta, Can., Bassia elliptica, *Dalzell.*
Pachoonda, Mahr., Capparis divaricata, *Lam.*
Padal, also Sammu of Panjab, Stereospermum suaveolens, *W. Ic.*
Padari, Tel., Stereospermum suaveolens, *W. Ic.*
Padel, Mahr., Stereospermum chelonoides, *W. I.*
Pade narayan, Tam., Poinciana elata, *Linn.*
Padlu on the Ravi, Marlea begonifolia, *Roxb.*
Padouk, Burm., Pterocarpus dalbergioides, *Roxb.*, also Pterocarpus indicus, *Willde.*
Padowk-wood, Anglo-Burm., Pterocarpus dalbergioides.
Padri, Hind., Stereospermum chelonoides, *W. I.*
Padriar, Panj., Bauhinia variegata, *L.* var.
Padri mara, Maleal., Stereospermum chelonoides, *W. Ic.*, also St. suaveolens, *W. I.*
Padrium of Panjab, Elæodendron roxburghii.
Padul, Mahr., Stereospermum chelonoides, *W. I.*
Padul also purrul, Mahr., Stereospermum suaveolens.
Pængiri-kurundu-gass, Singh., Cinnamomum citriodorum, *Thwaites.*
Paet-than, Burm., Spathodea stipulata, *Wall.*
Paghala mallie, Tam., Nyctanthes arbor-tristis.
Paharan kikar of Panjab, Acacia farnesiana, *Willd.*
Pahari pipal, Populus ciliata, *Wall.*
Paidi chettu, Tel., Ficus glomerata, *Roxb.*
Pailæ maram, Tam., Careya arborea, *Roxb.*
Pain-ga-du, Burm., Acacia, *Species.*
Pain-nai ? Burm., Artocarpus lakoocha, *Roxb.*
Paira, Beng., Psidium pyriferum, *Linn., Roxb.*
Pair cheronji, Hind., Buchanania latifolia, *Roxb.*
Paja of Kotgurh, Cerasus puddum.
Pakshu also kramali, Panj., Populus nigra, *L.*

Pa[illegible], Panjab, Euonymus fimbriata, *Wall.*
Pak[illegible] maram, Tam., Areca catechu, *Linn.*
Pala, Maleal., Alstonia scholaris, *R. Br.*
Pala of Panjab, Ficus glomerata, *Roxb.*
Pala? Tam., Amanoa patula, *Thw.*
Pala, Tam., Tel., Mimusops hexandrus, *Roxb.*
Pala, Tam., Tabernæmontana dichotoma, *Roxb.*
Pala chettu, Tel., Alstonia scholaris, *R. Br.*
Pala chettu, Tel., also Pala codija, Tel., Wrightia antidysenterica, *R. Br.*
Palaepean, Burm., Sapota, *Species.*
Pala garuda, Tel., Alstonia scholaris, *R. Br.*
Palam, Jav., Mangifera indica, *Linn.*
Palang, Singh., Kurrimia ceylanica, *Arn.*
Palapatta, Maleal., Wrightia antidysenterica.
Pala pundoo, Tel., Mimusops hexandrus, *Roxb.*
Palas, Hind., Palasa, Sans., Palasamu, Tel., Palasha, Sans., Palasi, Maleal., Palaso, Uria, Butea frondosa, *Roxb.*
Palatu-gaha, Singh., Hernandia sonora, *Linn.*
Palava maram, Tam., Mimusops indica, *A. DC.*
Palavarani, Anglo-Tel., Wrightia antidysenterica
Palava renu, Tel., Wrightia antidysenterica.
Palay pallam, Tam., Mimusops hexandrus, *Roxb.*
Palay wood, Eng., Wrightia antidysenterica.
Palenga-gass, Singh., Palenga zeylanica, *Thw.*
Pali maram of Ceylon, Mimusops indica, *A. DC.*,
Palita mandar, Beng., Erythrina indica, *Lam.*
Paliyara, Erythrina stricta, *Roxb.*
Pallas, Mahr., Butea frondosa, *Roxb.*
Pallay maram, Tam., Wrightia tinctoria, *R. Br.*
Palle, Tam., Mimusops hexandrus, *Roxb.*
Palma indica major, *Rumph.*, Cocos nucifera.
Palm-hout, Dut., Buxus, Box wood.
Palmyra tree, Eng., Borassus flabelliformis, *Linn.*
Palol, Singh., Spathodea adenophylla.
Paloo, Singh., also Paloo-gass, Singh., Mimusops hexandrus, *Roxb.* also Mimusops indica, *A.DC.*
Palosa, Pushtu, Panj., Acacia modesta, *Wall.*
Paluddar of Kashmir, Kaghan, Cedrus deodara, *Loud.*
Palurr of Chilas, Cedrus deodara, *Loud.*
Pama, Burm., Lagerstrœmia, *Species.*
Pama, also Talu, Panj., Juniperus squamosa.
Pamburu-gas, Singh., Limonia missionis, *Wall.*
Pamphoona, Uria, Stereospermum chelonoides.
Pan of Murree and Hazara, Rhus cotinus.
Pana, Maleal., Borassus flabelliformis, *Linn.*
Panam maram, Tam., Borassus flabelliformis.
Panam maram kattai, Tam., Borassus flabelliformis, *Linn.*
Panasa chettu, Tel., Artocarpus integrifolia, *Linn.*
Panatha, Burm., Laurus, *Species.*
Pana-wodachi-maram, Tam., Calosanthes indica.
Pana wood, Anglo-Tam., Calosanthes indica.
Panayala, Beng., Duk., Flacourtia cataphracta.
Panchi, Tel., Conocarpus acuminatus, *Roxb.*
Pandiki, Tel., Kydia calycina, *Roxb.*
Pandy-kyan, Tam., Eugenia Willdenovii, *DC.*
Panee juma, Beng., Salix tetrasperma *Roxb.*
Paneeyala, Beng., Flacourtia cataphracta, *Roxb.*
Pang ah? Burm., Terminalia chebula, *Retz.*
Pangi of Lahoul, Quercus ilex, *Linn.*
Pangla, Hind., Pavia indica, *Royle.*
Pangra, Mahr., also Pangri, Mahr., Erythrina indica.
Pania, Maleal., Eriodendron anfractuosum, *DC.*
Paniala, Hind., Flacourtia cataphracta, *Roxb.*
Paniala, Mal., Eriodendron anfractuosum, *DC.*
Panichekai maram, Tam., Garcinia glutinifera, *Ainslie.*

Pani-chika, Tam., Embryopteris glutinifera, *Roxb.*
Panichi maram, Tam., Diospyros embryopteris.
Panicled acacia, Eng., Acacia leucophlœa, *Willd.*
Pani-jika, Mal., Embryopteris glutinifera, *Roxb.*
Pani ke shumbali, Duk., Vitex trifolia, *Linn.*
Pani nai, Burm., Artocarpus integrifolia, *Linn.*
Pan jambool, Mahr., Jambosa salicifolia.
Panjirah, Mahr., Erythrina indica, *Lam.*
Pannam maram, Tam., Borassus flabelliformis, *Linn.*
Pannam ole, Tam., Cadjan, Malay.
Pannan, Panj., Populus alba, *L.*
Pan-they-ya, Burm., Vateria lanceolata.
Pan-thit-ya, Burm., Vateria lanceolata.
Pannas, Hind., Artocarpus integrifolia, *Linn.*
Pao brasil, Port., Cæsalpinia sappan, *Linn.*
Pao d' agila, Port., also Pao d' aguila, Port., also Pao d' aquila, Port., Eagle wood.
Pao-de-cobra, Port., Strychnos colubrina, *Linn.*
Pao de rosada, Port., Rosewood.
Papar, Panjabi, Euonymus fimbriata, *Wall.*
Papara pulia maram, Tam., Adansonia digitata, *L.*
Papatta, Tel., Pavetta tomentosa.
Paper mulberry, Eng., Broussonetia papyrifera.
Papirree, Tel., Pavetta tomentosa.
Pappar of Jhilam, Buxus sempervirens, *L.*
Pappel, Ger., also Pappelbaum, Ger., Populus.
Paprang of Kanawar, Buxus sempervirens, *L.*
Papri of Panjab. Ulmus integrifolia, *Roxb.*
Papri of Kumaon, Pongamia glabra, *Vent.*
Papri of Salt Range, Buxus sempervirens, *L.*
Papura, Hind., Gardenia latifolia, *Ait.*
Papyrius japonica, *Lam.*, syn. of Broussonetia papyrifera, *Vent.*
Papyrus sphærica, *Kæmpf.*, syn. of Sponia orientalis, *Voigt.*
Parasa, Hind., Butea frondosa, *Roxb.*
Paras, also kalakat, gidar; dak, bart, of Jhelum and Kaghan, Prunus padus, *Linn.*
Paras pipal, Duk., Thespesia populnea, *Lam.*
Parawah, Burm., Garcinia, *Species.*
Pargai, Quercus ilex, *Linn.*
Par jamb, Mahr., Olea dioica, *Roxb.*
Parool, Beng., Mahr., Stereospermum suaveolens, *W. Ic.*
Parsi badama chettu, Tel., Amygdalus communis.
Parsi vadam maram, Tam., Amygdalus communis, *Linn.*
Partal of Kaghan, Jhilam, Chamba, &c., Pinus excelsa, *Wall.*
Partridge wood of Loudon, Eng., Inga xylocarpa, *DC.*
Parumbay maram, Tam., Prosopis spicigera, *Linn.*
Parungi, Panj., Quercus dilatata, *Lindl.*
Parunki-mavah, Maleal., Anacardium occidentale, *Linn.*
Parushaka, Sans., Elate sylvestris, *Linn.*
Parwan, Panj., Tamarix orientalis, *L.*
Paser or Paseri of Hazara, Fothergillia involucrata.
Pash, Panjab, Euonymus fimbriata, *Wall.*
Pashi, Tel., Conocarpus acuminatus, *Roxb.*
Paspoo karami, Tel., Nauclea cordifolia, *Roxb.*
Passu-munna-kiray, Tam., Premna integrifolia.
Pastuwanna, Panjab, Grewia oppositifolia, *Buch.*
Patakhen, Panj., Cratægus oxyacantha, *Linn.*
Patali, Tel., Stereospermum suaveolens, *W. Ic.*
Patanga, Sans., Tel., Cæsalpinia sappan, *Linn.*
Patee of Kumaon, Hymenodyction excelsum.
Pat fannas, Mahr., Artocarpus hirsuta, *Lam.*
Pathiri maram, Tam., Stereospermum chelonoides, *W. Ic.*

CSL

[illegible]nanga, Tam., Sapindus emarginatus, *Vahl.*
Pouparthia mangifera, *Blume*, syn. of Spondias mangifera, *Pers.*
Prabba chettu, Tel., Calamus rotang, *Linn.*
Prabbali chettu., Tel., Calamus rotang, *Linn.*
Preng, Jav., Bambusa.
Prasti of Cashmere, Populus alba, *L.*
Pride of India, Eng., Melia azedarach, *Linn.*
Prita, Panj., Pinus gerardiana, *Wall.*
Prot of Kangra, Marlea begonifolia, *Roxb.*
Prunus puddum, syn. of Cerasus puddum.
Prunus sebestana, *Pluk.*, syn. of Cordia myxa, *L.*
Psychodendron trifoliatum, *Wall.*, syn. of Andrachne trifoliata, *Roxb.*
Pteridophyllum decipiens, *Thwaites*, syn. of Filicium decipiens, *Thw.*
Pteridophyllum decipiens, *Thw.*, Rhus decipiens, *Wight and Arn.*
Pterocarpus bilobus, *Don.*, syn. of Pterocarpus marsupium, *Roxb.*
Pterocarpus hemiptera, *Gært.*, syn. of Pterocarpus draco, *Linn.*
Pterocarpus officinalis, *Jacq.*, syn. of Pterocarpus draco, *Linn.*
Pterocarpus sissu, *Roxb.*, syn. of Dalbergia sissoo, *Roxb.*
Pterospermum canescens, *Roxb.*, syn. of Pterospermum suberifolium, *Lam.*
Pterospermum suberifolium, *Willde*, syn. of Pterospermum heyueanum, *Wall.*
Pubha, Mahr., Chickrassia tabularis, *Ad Juss.*
Pucha cotta maram, Tam., Sapindus emarginatus, *Vahl.*
Pudari, Panjab, Hamiltonia suaveolens, *Roxb.*
Pudding pipe tree, Eng., Cassia fistula, *Linn.*
Puddowk of Tavoy, Pterocarpus indicus, *Willde.*
Puhn, Bisaya, Lanun, Malay of Sumatra, Tree.
Pujal? Hind., Buchanania latifolia, *Roxb.*
Pukandel, Tam., Tel., Rhizophora mucronata, *L.*
Puki tuma, Tel., Acacia latronum, *Willd*
Pula mula elavu, Tam., Bombax malabaricum, *DC.*
Pulasa, Beng., Pulas tree, Eng., Butea frondosa, *R.*
Pulaspapare ka phul, Duk., Flowers of Butea frondosa, *Roxb.*
Puli shinta, Tel., Bauhinia malabarica, *Roxb.*
Pulia maram, Tam., Tamarindus indica, *Linn.*
Pulim, Singh., Eriodendron anfractuosum, *DC.*
Puliyam pallam, Tam., Tamarindus indica, *Linn.*
Pulli, also Puli of Panjab, Kydia calycina, *Roxb.*
Pulloua, Burm., Garcinia, *Species.*
Pullus, Mahr., Butea frondosa, *Roxb.*
Pu maram, Tam., Schleichera trijuga, *Willd.*
Puna of Rawalpindi, Kaghan, &c., Ehretia aspera.
Punag, Hind., Rottlera tinctoria, *Roxb.*
Punag, Can., Calysaccion longifolia, *Roxb.*, *Wight*,
Punaga, Sans., Calophyllum inophyllum, *Linn.*
Pundaroo, Tel., Hymenodyction excelsum, *Wall.*
Pungah? Burm., Ñauclea diversifolia, *Wall.*
Pungum yennai, Tam., Sapindus emarginatus, *Vahl*
Punna of Panjab, Ehretia serrata, *Roxb.*
Punnaga, Sans., Rottlera tinctoria, *Roxb.*
Punnaga chettu, Tel., Calophyllum inophyllum, *Linn.*
Punnagamu chettu, Tel., Calophyllum inophyllum, *Linn.*
Punnagamu chettu, Tel., Rottlera tinctoria, *Roxb.*
Punra of Panjab, Ehretia serrata, *Roxb.*
Pur, Tel., Eriodendron anfractuosum, *DC.*
Purede, New Zealand, Vitex littoralis.
Purging cassia, Eng., Cassia fistula, *Linn.*
Purgir cassie, Ger., Cassia fistula, *Linn.*
Puroos, Beng., Xylocarpus granatum, *Kon.*
Purple-coned, fir, Eng., Pinus webbiana, *W. & L.*
Purple mountain ebony, Eng., Bauhinia purpurea, *Linn.*
Pursa maram, Tam., Thespesia populnea, *Lam.*
Pursing kai maram, Tam., Thespesia populnea.
Purula, Hind., Stereospermum suaveolens *W. Ic.*
Pustul, N. W. Him., Abies smithana, *Wall.*
Putajan, Hind., Putranjiva roxburghii, *Wall.*
Putalli maram, Tam., Givottia rottleriformis, *Griff.*, Tam.
Puta-tanni maram, Tam., Careya arborea, *Roxb.*
Putchalai maram, Tam., Dalbergia paniculata, *Roxb.*
Putchalay wood, Anglo-Tam., Dalbergia paniculata, *Roxb.*
Putri, Hind., Siphonanthus indica.
Puttang, Duk., Cæsalpinia sappan, *Linn.*
Putta pala, Tel., Ixora parviflora, *Vahl.*
Putta pulow of Kumaon, Kydia calycina, *Roxb.*
Putta thamara, Malay, Macaranga indica, *R. W.*
Puvandi, Tam., Sapindus emarginatus, *Vahl.*
Puvandi cottay yennai, Tam., Sapindus emarginatus, *Vahl.*
Puvarasa maram, Tam., Thespesia populnea, *Lam.*
Pu vu maram, Tam., Schleichera trijuga. *Willd.*
Puwak, Singh., Areca catechu, *Linn.*
Puzzeen zwa, Burm., Ternstrœmia, *Species.*
Pya of Akyab, Iron wood.
Pyangado, Burm., Inga xylocarpa, *DC.*
Pyari, Singh., Pleurostylis wightii, *W. & A.*
Pyaru, Singh., Pleurostylis wightii, *W. & A.*
Pyeng-k'ado, Burm., Inga xylocarpa, *DC.*
Pyen-ma? Burm., Lagerstrœmia microcarpa, *Roxb.*
Pyen-ma-phoo, Burm., Lagerstrœmia, *Species.*
Pyen-ma-zoat-gyee, Burm., Lagerstrœmia, *Sp.*
Pyimma, Burm., Lagerstrœmia, *Species.*
Pykassie, Dut., Cassia fistula, *Linn.*
Pym-mah, Burm., Lagerstrœmia reginæ, *Roxb.*
Pymmah-nee, Burm., Lagerstrœmia pymmah, *Mc.*
Py-na-the, Burm., Artocarpus, *Species.*
Pyn-kado, Burm., Inga xylocarpa, *DC.*
Pyrrhanthus littoreus, *Jack.*, Lumnitzera littorea.
Pyrularia zeylanica, *DC.*, syn. of Pyrularia wallichiana, *A. DC.*

Q

Queen Lagerstrœmia, Eng., Lagerstrœmia reginæ, *Roxb.*
Quercia, It., Oak. Quercus, Lat., Oak.
Quercus baloot, *Griff.*, syn. of Quercus ilex, *Linn.*
Quercus floribunda, *Lindl.*, syn. of Quercus dilatata, *Lindl.*
Quercus serrata, *Roxb.*, syn. of Quercus prinodes *Linn.*
Quercus taxiflora, syn. of Quercus dilatata, *Lindl.*
Quinaria lansium, *Lour.*, syn. of Cookia punctata, *Retz.*

R

Raane, Tam., at Batticaloa, or grain wood, Alseodaphne semicarpifolia.
Raban, Panj., Chionanthus, *Species.*
Racha mamidi, Tel., Mangifera indica, *Linn.*
Rachcha manu, Tel., Xanthoxylon rhetsa, *Roxb.*
Racta-chundun, Singh., Pterocarpus santalinus.
Racta chandana Sans., Pterocarpus santalinus.
Racta shrava, Sant., Garcinia cambogia, *Desroux.*
Radami, Tam., Barringtonia acutangula, *Gærtn.*
Rademachia incisa, *Thunb.*, syn. of Artocarpus incisa, *Linn. fl.*
Rag of Lahaul, Abies smithiana, *Wall.*
Ragta hanay ? Can., Pterocarpus marsupium.
Rai of Panjab, Abies smithiana, *Wall.*
Rai jamun, Hind., Eugenia jambolana, *Lam.*
Raisin Berbery, Eng., Berberis lycium, *Royle.*
Raja jembu, Sans., Eugenia jambos, *Linn.*
Rajain, Panjab, Ulmus integrifolia, *Roxb. Cor. Pl. Fl.*
Rajain baree, Doab, Alnus, *Sp.*
Rajun, Hind., Mimusops hexandrus, *Roxb.*, *W Ic.*
Rakhal phul ka jhar, Hind., Schmidelia serrata, *DC.*
Rakt chandan, Mahr., Pterocarpus santalinus, *L.*
Rakta chandanam, Tel., Pterocarpus santalinus, *L.*
Rakta gandham, Tel., Pterocarpus santalinus, *L.*
Rakta-kanchan, Beng., Bauhinia purpurascens.
Rakta-simal, Hind., Bombax malabaricum, *DC.*
Rakta-shimlu, Beng., Bombax malabaricum, *DC.*
Rakto-chandana, Beng., Hind., Pterocarpus santalinus, *Linn.*
Rakto-shimal, Beng., also Rakto-simal, Beng., Bombax malabaricum, *DC.*
Ral, Hind., also Rala, Hind., Shorea robusta, *Roxb.*
Ram-babul, H., Mahr., Acacia arabica, var.
Rambaya, Malay., Metroxylon sago.
Ramena pu maram, Sterculia guttata, *Roxb.*
Rameneia delle, Singh., Millingtonia, *Species.*
Ram-guoah, Beng., Hind., Caryota urens, *Linn.*
Ram-julparee, Hind., Sterculia parviflora, *Roxb.*
Ram tumbut, Mahr., Flacourtia montana, *Gibson.*
Rana, Arab, Punica granatum, *Linn.*
Ranai, Panjab, Euonymus fimbriata, *Wall.*
Ran-bor, Mahr., Zizyphus glabrata, *Heyne.*
Ran dal chini, Mahr., Cinnamomum iners, *Nees.*
Ran fannas, Mahr., Artocarpus hirsuta, *Lam.*, also Art. sylvestris, *Gibson.*
Ranguna, Eng., Adenanthera pavonina, *Linn.*
Ran jambool, Mahr., Eugenia caryophyllata, *Thun.*
Ranjana, Sans., Pterocarpus santalinus, *Linn.*
Ranjana, Hind., Adenanthera pavonina, *Linn.*
Ran-palai maram, Tam., Spathodea arcuata, *W. Ic.*
Ran sirris, Mahr., Albizzia odoratissima, *Benth.*
Ranzuru, Panj., Pinus longifolia, *Lamb.*
Rapo, Bugi, Areca catechu, *Linn.*
Rara of Amritsur, Randia longispina, *DC.*
Rara, Panjabi, Randia dumetorum, *Lam.*
Rarak, Malay., Sapindus emarginatus, *Vahl.*
Rari, Chenab, Prinsepia utilis, *Royle.*
Rasamala, Malay, Liquidambar altingia, *Blume.*
Rata-del, Singh., Artocarpus incisa, *Linn. fil.*
Rata, Ghorka, Tel., Zanthochymus pictorius, *Roxb.*
Rat-kihiri-gas, Singh., Acacia catechu, *Willd ?*
Rat kihiri, Singh., Santalum album, *Linn ?*
Rattan, Eng., Cane, Eng., Calamus rotang, *Linn.*
Rattan Kat, of Kaghan, Andromeda ovalifolia, *Don.*
Rau of Sutlej, Abies smithiana, *Wall.*
Rau, Panjab, Cotoneaster obtusa, *Wall.*
Rauni, Panjab, Acacia leucophlœa, *Willd.*
Ravudana Tel., Dillenia pentagyna, *Roxb.*
Rawa-dara, Tel., Dillenia pentagyna, *Roxb.*
Rawan iddala, Singh., Wendlandia notoniana, *Wall.*
Rawan, Singh., Wendlandia notoniana, *Wall.*
Rebdun, Panj., Tecoma undulata, *G. Don.*
Red-arghawan, Eng., Bauhinia variegata, *L.*, var.
Red cotton tree, Eng., Bombax malabaricum, *DC.*
Red guava, Eng., Psidium pomiferum, *Linn.*
Red jambo, Eng., Tha bya-nee, Burm.
Red pymmah, Anglo-Burm., Lagerstrœmia pymmah.
Red sandal wood, Eng., Pterocarpus santalinus.
Red sanders wood, Eng., Pterocarpus santalinus.
Red wood Eng., Cæsalpinia sappan, *Linn.*
Red wood tree, Eng., Adenanthera pavonina, also Pterocarpus dalbergioides, also Soymida febrifuga, *Ad. Juss.*
Redemachia integra, *Thunb.* syn. of Artocarpus integrifolia, *Linn.*
Reen, Mehra forest, Hazara Quercus, *Species.*
Regdawan, Pushtu, Panj., Tecoma undulata, *G. Don.*
Regu chettu, Tel., also Regu manu, Tel., Zizyphus jujuba, *Willde.*
Regutti, Tel., Capparis grandis, *Linn.*
Reichardia decapetala, *Roth.*, syn. of Cæsalpinia sepiaria, *Roxb.*
Reine kohle, Ger., Charcoal.
Rek of Kanawar, Amygdalus persica.
Religiosa decipiens, *W. & A.*, syn. of Filicium decipiens, *Thw.*
Renga, Tel., Zizyphus jujuba, *Willde.*
Reodan, Panj., Tecoma undulata, *G. Don.*
Reru, Panj., Acacia jacquemonti, *Bentham*, also Acacia leucophlœa, *Willd.*
Reunah of Kumaon, Rottlera tinctoria, *Roxb.*
Reunjah, Hind. of Central Provinces, Acacia leucophlœa, *Willd.*
Reus, Panjab, Cotoneaster obtusa, *Wall.*
Reyla, Tel., Cassia fistula, *Linn.*
Rglta, *Lod.*, Tamarix gallica, *Linn.*
Rghelta, *Lod.*, Tamarix dioica, *Roxb.*
Rhamnus jujuba, *Linn.*, syn. of Zizyphus jujuba, *Willde.*
Rhamnus nerija *Spreng*, syn. of Elæodendron roxburghii, *W. & A.*
Rhamnus nummularia, Burm., Zizyphus nummularia, *W. & A.*
Rhamnus trigynus, *Don.*, Sageretia oppositifolia, *Brogn.*
Rhetsa manu, Tel., Xanthoxylon rhetsa, *Roxb.*
Rhetsa maram, Tam., Xanthoxylon rhetsa, *Roxb.*
Rheyn, Mahr., Soymida febrifuga, *Ad. Juss.*
Rhizophora candelaria, *DC.*, syn of Rhizophora conjugata *Linn.*, also of Rhizophora mucronata, *Lam.*
Rhizophora cascolaris, *Linn.*, syn. of Sonneratia acida, *Willd.*
Rhizophora corniculata, *L.* syn. of Ægiceras fragrans, *Kon.*

Pa[illegible] of Chamba hills, Lonicera quinquelocularis.
Pat-kanda, Singh., Macaranga tomentosa, *W. Ic.*
Patta-del, Singh., Artocarpus, *Species.*
Pattai, Tam., Mimusops hexandrus, *Roxb.*
Pattang, Mahr., Hind., Cæsalpinia sappan, *Linn.*
Pattingay, Hind., Cæsalpinia sappan, *Linn.*
Pattipariti, Tam. of Ceylon, Guazama tomentosum, *H. B.*
Pattungh, Tam., Cæsalpinia sappan, *Linn.*
Patulee, Beng., Sans., Stereospermum suaveolens, *W. Ic.*
Pavetta, Singh., Pavetti, Tam., Pavetta indica.
Patwa Mawal, Tel., Bauhinia racemosa, *Lam.*
Payani, Maleal., Vateria indica, *Linn.*
Pear-shaped guava tree, Eng., Psidium pyriferum, *Linn.*
Peda-kal-mesura, Tel., Casearia ovata, *Roxb.*
Peda karinga, Tel., Gardenia latifolia, *Ait.*
Peda vara goki, Tel., Salvadora indica, *Royle.*
Pedda ankudu chettu, Tel., Wrightia antidysenterica, *R. Br.*
Pedda botuku, Tel., Cordia myxa, *Linn.*
Pedda canrew, Tel., Flacourtia sapida, *Roxb.*
Pedda chilka duduga, Tel., Miliusa velvitina, *H. f. et T.*, also Uvaria tomentosa, *Roxb.*
Pedda danti, Tel., Celastrus montana. *Roxb.*
Pedda gumudu, Tel., Gmelina arborea, *Roxb.*
Pedda illinda, Tel., Diospyros chloroxylon, *Roxb.*
Pedda kala mesara, Tel., Casearia, *Species.*
Pedda kalinga, Tel., Dillenia speciosa, *Thunb.*
Pedda kanaregu, Tel., Flacourtia sapida, *Roxb.*
Pedda manu, Tel., Ailantus excelsus, *Roxb.*
Pedda neredu, Tel., Eugenia jambolana, *Lam.*
Pedda nowlee, Tel., Ulmus integrifolia, *Roxb.*
Padda pale, Tel.. Mimusops hexandrus, *Roxb.*
Pedda patseru, Tel., Albizzia procera, *Benth.*
Pedda are, Tel., Bauhinia purpurea, *Linn.*
Pedda sopara, Tel., Dalbergia frondosa, *Roxb.*
Pedda ulimera, Tel., Diospyros chloroxylon, *Roxb.*
Peeloo, Mahr., Salvadora persica, *Linn.*
Peemah, Burm., Lagerstrœmia reginæ, *Roxb.*
Peena of Kanawar, Gynaion vestitum, *DC.*
Peepul, Hind., Ficus religiosa, *Roxb.*
Peetumma, Tel., Vachellia farnesiana, *W. & A.*
Pedong, Burm., Pterocarpus marsupium, *Roxb.*
Pehimbia-gass, Singh., Pteridophyllum decipiens, *Th.*
Pehimbive, Singh., Rhus decipiens, *W. & A.*
Peing-nai, Burm., Artocarpus integrifolia, *Linn.*
Peini-mara, Maleal., Vateria indica, *Linn.*
Pela, Maleal., Psidium pyriferum, *Linn.*
Pelen, Singh., Kurrimia ceylanica, *Arn.*
Pelou, Maleal., Careya arborea, *Roxb.*
Pe maram, Tam., Sterculia guttata, *Roxb.*
Pemu, Tel., Calamus rotang, *Linn.*
Penary maram, Tam., Sterculia fœtida, *Linn.*
Penata maram, Tam., Sterculia fœtida, *Linn.*
Penela, Singh., Sapindus emarginatus, *Vahl.*
Pencil cedar, Eng., Juniperus excelsa, *Bieb.*
Pen-lai-ung, Burm., Xylocarpus granatum, *Kœn.*
Penlay-oong, Burm., Xylocarpus granatum, *Kœn.*
Pen-lay-pyoum, Burm., Xylocarpus granatum.
Pentaptera angustifolia, *Roxb.*, syn. of Terminalia arjuna, *W. & A.*, also of T. berryi, *W. & A.*
Pentaptera bialata, *Roxb.*, syn. of Terminalia bialata, *Wall.*
Pentaptera coriacea, *Roxb.*, syn. of Terminalia coriacea, *W. & A.*
Pentaptera glabra, *Roxb.*, syn. of Terminalia glabra, *W. & A.*
Pentaptera obovata, *DC.*, syn. of Terminalia glabra, *W. & A.*
Pentaptera paniculata, *Roxb.*, syn. of Terminalia paniculata, *W. & A.*
Pentaptera tomentosa, *Roxb.*, syn. of Terminalia tomentosa, *W. & A.*
Pente veduru, Tel., Bambusa.
Penti-tati chettu, Tel., Borassus flabelliformis.
Pepiliya, Singh., Aporosa latifolia, *Thwaites.*
Pepu, Tel., Calamus rotang, *Linn.*
Pera kai, Maleal., Psidium pyriferum, *Linn.*
Perambu, Tam., also Perambugal, Tam., Calamus rotang, *Linn.* Canes.
Perei pastawane, Panjab, Fluggea virosa, *Roxb.*
Perena teregram, Maleal., Ficus glomerata, *Roxb.*
Perin jara, Mahr., Eugenia jambolana, *Lam.*
Perin todali, Maleal., Zizyphus jujuba, *Willde.*
Persian lilac, Eng., Melia azedarach, *Linn.*
Persicon, Greek., Juglans regia, *Linn.*
Peru chettu, Tel., Ailantus malabaricus, *DC.*
Peru mara, Maleal., Ailantus malabaricus, *DC.*
Peru maram, Tam., Ailantus excelsus, *Roxb.*
Peru nagal, Tam., Eugenia jambolana, *Lam.*
Petaloma alternifolium, *Roxb.*, syn. of Lumnitzera racemosa, *Willde.*
Petan, Singh., Bauhinia tomentosa, *Linn.*
Petarcura, Hind., Chaulmoogra odorata.
Pethri of Kaghan, Juniperus squamosa.
Pet-woon, Burm., Berrya mollis, *Wall.*
Peuplier, Fr., populus.
Pey yapa, Tel., Ailantus excelsus, *Roxb.*
Peyara, Beng., Psidium pyriferum, *Linn.*
Pha bhan of Akyab, Bignonia stipulata, *Roxb.*
Phag also Phagura of Kaghan, Ficus caricoides.
Phagwari, Panjab, Ficus caricoides.
Phala also Phalai, Panj., Acacia modesta, *Wall.*
Phalja of Hazara, Murree, Populus ciliata, *Wall.*
Phalwarra, Hind., Bassia butyracea.
Phanera purpurea, *Bth.*, syn. of Bauhinia variegata, *Linn.*
Phannas, Hind., Jack-wood.
Phansi, Can., Mahr., Carallia lucida, *Roxb.*
Pha-oun, Burm., Osyris peltata.
Phassie, Mahr., Tam., Dalbergia paniculata, *Roxb.*
Phedu or Feru of Chamba, Ficus roxburghii, *Wall.*
Phemla, Sans., Sapindus emarginatus, *Vahl.*
Phet woon, Burm., Grewia hookerii, *McCl.*, also Grewia spectabilis.
Phindak, Panj., Cratægus oxyacantha, *Linn.*
Philla, Panjab, Hamiltonia suaveolens, *Roxb.*
Phipni of Kaghan, Rhamnus virgatus, *Roxb.*
Phœnix sylvestris, *Roxb.*, syn. Elate sylvestris, *L.*
Phog, Panjabi, Calligonum polygonoides.
Phul, Panjab, Hamiltonia suaveolens, *Roxb.*
Phuldoo of Kumaon, Hymenodyction excelsum.
Phul kanri, Hazara, Deutzia staminea.
Phullindah jamoon of Kumaon, Syzygium jambolanum, *DC.*
Phulsa, Beng., Grewia asiatica, *Linn.*
Phul-sola, Beng., Æschynomene aspera, *Linn.*
Phulwara, Chenab, Prinsepia utilis *Royle.*
Phunsi, Guz., Jack-wood.
Phurili of Kashmir, Deutzia staminea.
Phut of Kaghan, Murree, Lonicera quinquelocularis.
Phyllanthus emblica, *Linn.*, syn. of Emblica officinalis, *Gærtn.*
Phyllanthus virosus, *Roxb.*, syn. of Fluggea virosa, *Roxb.*
Pia-sal, Guz., Buchanania latifolia, *Roxb.*
Piasal, Duk., Terminalia tomentosa, *W. & A.*

Pia[illegible], Tel., Pterocarpus marsupium, *Roxb.*
Pia[illegible], Panj., and Spiti, Alnus nepalensis, Alnus, *Sp.*
Piane, It., Deals.
Picea khutrow, syn. of Picea webbiana, *Lamb.*
Picea pindrow, syn. of Pinus webbiana, *W & L.*
Picea webbiana, syn. of Pinus webbiana, *W & L.*
Pieng, Akyab, Iron-wood.
Pigeon pea, Eng., Cytisus cajan, *Linn.*
Pihimbiya, Singh., Filicium decipiens, *Thw.*
Pila champa, Hind., Mahr., Michelia nilagirica.
Pila maram, Tam., Artocarpus integrifolia, *Linn.* Jack-wood.
Pilavuh, Maleal. Artocarpus integrifolia, *Linn.*
Pilla marda, Tam., Terminalia chebula, *Retz.*
Pilla-marrada, Can., Terminalia chebula, *Retz.*
Pilchi, Panj., Tamarix gallica, *Linn.*, also T. dioica, *Roxb.*
Pilkan, Hind., Ficus venosa.
Pilu also Pil, also Tak, Salvadora oleoides, *Dne.*
Pin, Burm., tree.
Pinang, Malay, Areca catechu, *Linn.*
Pindi chettu, Tel., Ficus asperrima, *Roxb.*
Piney maram, Tam., Vateria indica, *Linn.*
Piney varnish tree, Eng., Vateria indica, *Linn.*
Pingadoo, Burm., Inga xylocarpa, *DC.*
Pingyat, Panj., Cratægus oxyacantha, *Linn.*
Pinibaru, Singh., Eugenia mooniana, *Wight.*
Pin-lay ka-na-zoe, Burm., Heritiera, *Species.*
Pinna, Tel., Bassia longifolia, *Linn.*
Pinna nelli, Tel., Premna integrifolia, *Roxb.*
Pinna ? vara gogu, Tel., qu ? chinna Salvadora persica, *Linn.*
Pinnare maram, Tam., Sterculia fœtida, *Linn.*
Pinnay maram, Tam., Dillenia pentagyna, *Roxb.*
Pinnay maram, Tam., Calophyllum inophyllum, *L.*
Pinni of Kafiristan, Pinus excelsa, *Wall.*
Pinus dammara, *Lamb.*, syn. of Dammara orientalis, *Rumph.*
Pinus deodara, *Roxb.*, syn. of Cedrus deodara.
Pinus dumosa, *Lamb.*, syn. of Pinus brunoniana, *Wall.*
Pinus khutrow, syn. of Abies smithiana, *Wall.*
Pinus morinda, syn. of Abies smithiana, *Wall.*
Pinus smithiana, syn. of Abies smithiana, *Wall.*
Pinus spectabilis, *Lamb.*, syn. of Pinus webbiana, *Wall. & Lamb.*
Pioppa, It., Populus.
Piplostylis indica, Dalz, syn of Clausena indica, *Oliver.*
Pishanna, Tel., Maba buxifolia, *Pers.*
Pishor of Kaghan, Fothergillia involucrata.
Pisinika, Tel., Maba buxifolia, *Pers.*
Pita-kara, Hind., Chrysophyllum roxburghii, *G. Don.*
Pita vrikshamu, Tel., Spondias mangifera, *Pers.*
Pithecolobium bigeminum, *Benth.*, syn., of Inga bigemina, *Willde.*
Pithecolobium dulce, *Benth.*, syn. of Inga dulcis, *Willde.*
Pit sal, Beng., Pterocarpus marsupium, *Roxb.*
Pit shala, Hind., Pterocarpus marsupium, *Roxb.*
Pittosporum verticillatum, *Wall.*, syn. of Pittosporum floribundum, *W. & A.*
Piyala, Beng., Buchanania latifolia, *Roxb.*
Piya shal, Beng., Terminalia tomentosa, *W. & A.*
Pla, Panjab, Butea frondosa, *Roxb.*
Planches minces, Fr., Deals.
Plewane, Pushtu, Salvadora oleoides, *Dne.*
Plohierro, *Sp.*, Iron wood.
Podala-manu, Tel., Acacia catechu, *Willd.*
Poeechandia, Uria, Elæocarpus, *Species.*
Pogada manu, Tel., Mimusops elengi, *Linn.*
Poghada mullai, Tel., Nyctanthes arbor-tristis.
Pohn, Sea-dyak of Borneo, Tree.
Pohun, Adang (Murut) of Borneo, Tree.
Poibogulu, Tel., Charcoal.
Poinciania coriaria, *Jacq.*, syn. of Cæsalpinia coriaria, *Willde.*
Poison nut tree, Eng., Strychnos nux vomica.
Poka chettu, Tel., Areca catechu, *Linn.*
Po-kash, Panjab, Fothergillia involucrata.
Pokoh, Malay of Borneo, Tree.
Polach of Panj., Albizzia odoratissima, *Benth.*
Pola also Pula, Kydia calycina, *Roxb.*
Pol gaha, Singh. Cocos nucifera, *Linn.*
Pollai, Tel., Antidesma paniculatum, *Roxb.*
Polpa di cassia, It., Cassia fistula, *Linn.*
Polyalthia longifolia, syn. of Guatteria longifolia, *Wall.*
Polyphema ajjaca, *Lour.*, syn. of Artocarpus integrifolia, *Linn.*
Polyozus ? maderaspatanus, *DC.*, syn. of Stylocoryna webera, *A. Rich.*
Pomegranate, Eng., Punica granatum, *Linn.*
Pomeranzen, Ger., Citrus aurantium, *Linn.*
Pomeranezu, Rus., Citrus aurantium, *Linn.*
Pomum adami of Marco Polo, Zizyphus jujuba, *Willde.*
Pongoo, Tam., Calophyllum bracteatum.
Ponna chettu, Tel., Calophyllum inophyllum, *Linn.*
Ponna, Maleal., Calophyllum inophyllum, *Linn.*
Ponnagam, Maleal., Rottlera tinctoria, *Roxb.*
Ponnang cottai, Tam., Sapindus emarginatus, *Vahl.*
Ponna-pu, Tel., Calophyllum inophyllum, *Linn.*, *Roxb.*
Pon-padria maram, Tam., Stereospermum chelonoides, *W. Ic.*
Poo-arasoo, Can., Thespesia populnea, *Lam.*
Pooli pilla, Tam., Cinnamomum iners, *Nees.*
Poonga maram, Tam., Pongamia glabra, *Vent.*
Poon spar tree, Eng., Dillenia pentagyna, *Roxb.*
Poon-yet, Burm., Calophyllum, *Species.*
Pooroo, Uria, Conocarpus latifolia, *Roxb.*
Poounam, Maleal., Bassia latifolia, *Roxb.*
Poovutty maram, Nephelium longan, *Camb.*
Popelier, Dut., Populus.
Po-piah, Burm., Acacia, *Species.*
Poplar, Eng., Populus.
Populus, Lat., Populus.
Porasa maram, Tam., Butea frondosa, *Roxb.*
Porasham, Tam., Chloroxylon swietenia, *Roxb.*
Porcupine wood, Eng., Borassus flabelliformis, *Linn.*
Poresh, Beng., Thespesia populnea, *Lam.*
Porilla sapara, Tel., Dalbergia paniculata, *Roxb.*
Portia tree, Eng., Thespesia populnea, *Lam.*
Poruwa mara, Singh., Canthium didymum, *Gært.*
Posoqueria dumetorum, *Roxb.*, syn. of Randia dumetorum, *Lam.*
Posoqueria longiflora, *Roxb.*, syn. of Randia longiflora, *Lam.*
Posoqueria longispina, *Roxb.*, syn. of Randia longispina, *DC.*
Posoqueria multiflora, *Bl.*, syn. of Randia longiflora, *Lam.*
Posuku, Tel., Schleichera trijuga, *Willd.*, *Roxb.*
Potari, Tel., Kydia calycina, *Roxb.*
Potu veduru, Tel., Bambusa.
Pouk, Burm., Butea frondosa, *Roxb.*
Pou kodel, Can., Ægiceras fragrans, *Kæn.*
Pouk-pin, Burm., Butea frondosa, *Roxb.*

CSL

Rhizophora cylindrica, *Roxb.*, syn. of Bruguiera parviflora, *W. & A.*
Rhizophora gymnorrhiza, *Linn.*, syn.of Bruguiera Rheedii, *L. Herit.*
Rhizophora macrorrhiza *Griff*, syn. of Rhizophora mucronata, *Lam.*
Rhizophora mangle, *Linn.*, syn. of Rhizophora mucronata, *Lam.*
Rhizophora parviflora, *Roxb.*, syn. of Bruguiera parviflora, *W. & A.*
Rhododendron puniceum, *Roxb.*, syn. of Rhododendron arboreum, *Sm.*, *W. Ic.*
Rhododendron purpureum, *Buch.*, syn. ot Rhododendron arboreum, *Sm.*
Rhus amela, *G. Don.*, syn. of Rhus buckiamela, *Roxb.*
Rhus decipiens, *W. & A. W. Ill.*, syn. of Pteridophyllum decipiens, *Th.*
Rhus integerrima, *Wall*, syn. of Pistacia integerrima, *H. f. & Th.*
Rhus juglandifolia, *Wall*, syn. of Rhus vernicifera, *DC.*, also Rhus semialata.
Rhus roxburghii, *DC.*, syn. of R. buckiamela, *R.*
Rhus vernix. *Thunb.* syn. of Rhus vernicifera, *DC*·
Ri, PANJAB., Cotoneaster obtusa, *Wall.*
Ri of Kanawar, Pinus gerardiana, *Wall.*
Riedelia velutina, *DC.* syn. Visenia velutina, *W. Ic.*
Rikan, PANJ., Populus alba, *L.*
Rikul of the Panjab, Rhus acuminata, *DC.*
Rikunra of Jhelum, Alnus, *Sp.*
Rin of Hazara, Quercus incana.
Ring, PANJ., Cratægus oxyacantha, *Linn.*
Ring, PANJ., Quercus incana.
Ringah? BURM., Nauclea diversifolia, *Wall.*
Ringal, PANJ., Arundinaria utilis.
Ringo, PANJ., Cratægus oxyacantha, *Linn*
Rinj of Hazara, Quercus incana.
Rinsot of Kanawar, Eleagnus conferta.
Rishta DUK., Sapindus emarginatus, *Vahl.*
Rissoa Ceylanica, *Arn.*, syn. of Sclerostylis ceylanica, *Wight. Ill.*
Ritah, DUK., Sapindus emarginatus, *Vahl.*
Ritha, HIND., Sapindus acuminatus, *Wallich.*
Ritha, BENG., HIND., Sapindus detergens, *Roxb.*
Rithi-ka-jhar, HIND., Sapindus rubiginosus, *Roxb.* also S. emarginatus, also S. detergens
Riti-gaha, SINGH., Antiaris innoxia, *Blume.*
Riti-ka-jhar, HIND., Sapindus emarginatus, *Vahl.*
Ritti-gaba, SINGH., Antiaris innoxia, *Blume.*
Riu, PANJAB, Cotoneaster obtusa, *Wall.*
Rivinia paniculata, *Forsk.*, syn. of Salvadora persica, *Linn.*
Robinia mitis, *Linn.*, syn. of Pongamia glabra, *Vent.*
Roble, PORT., *Sp.* Oak.
Rod bauhinia, ENG., Bauhinia scandens, *Linn.*
Rohan, BENG., Soymida febrifuga, *Ad. Juss.*
Rohira, PANJ., Tecoma undulata, *G. Don.*
Rohitaka, HIND., Soymida febrifuga, *Ad. Juss.*
Rohuna, BENG., HIND., Soymida febrifuga, *A. J.*
Rohuni, MAHR., Soymida febrifuga, *Ad. Juss.*
Rondeletia asiatica, *Linn.*, syn. of Stylocoryna webera, *A. Rich.*
Rontal, JAV., Borassus flabelliformis, *Linn.*
Rose apple, ENG., Eugenia jambos, *Linn.*
Rosewood, ENG., Blackwood, ENG., also Dalbergia sissoides, *Grah.*, also Pterocarpus indicus, *Willde*, also Dalbergia latifolia, *Roxb.*
Rotan, MALAY, Canes, Calamus rotang, *Linn.*
Rotangha, TEL., Schleichera trijuga, *Willd.*
Rottlera stylanthus, *Thw.*, Podadenia sapida, *Thw.*
Rouch, BENG., Morinda bracteata, *Roxb.*
Rowadan, TEL., Dillenia pentagyna, *Roxb.*
Roxburgh's Cassia, ENG., Cathartocarpus roxburghii.
Royal walnut tree, ENG., Juglans regia, *Linn.*
Rozen-holz, GER., Rosewood.
Ructo-kanchan, BENG., Bauhinia variegata, *Linn.*
Rudracha, TEL., Elæocarpus tuberculatus, *Roxb.*
Rudrachai, TAM., Elæocarpus tuberculatus, *Roxb.*
Rudra challu, TEL., Elæocarpus ganitrus, *Roxb.*
Rudrakaya, DUK. TAM., Elæocarpus ganitrus, *Roxb.*
Rudraksha chettu, TEL., Guazuma tomentosum, *H. B.*
Rudraksha shamba, TEL., Nauclea cadamba, *Wall.*
Rukan or Rukhan of Panjab, Syzygium jambolanum, *DC.*
Rukattana, SINGH., Alstonia scholaris, *R. Br.*
Rukh, PANJ., Tamarix dioica, *Roxb.*, also gallica, *Linn.*, also orientalis, *L.*
Ruknu, PANJAB, Siyzygium jambolanum, *DC.*
Rukto chandan, BENG., Adenanthera pavonina.
Rulla? also kith mara, CAN., Ficus glomerata, *Roxb.*
Rumnar or rumal, or rumbal of Kangra, Ficus glomerata, *Roxb.*
Rumom paio, MALEAL., Punica granatum, *Linn.*
Rumul of Kaghan, Ficus roxburghii, *Wall.*
Rung chul of Kanawar, Syringa emodi, *Wall.*
Rung chul, PANJABI, Euonymus fimbriata, *Wall.*
Runghun, HIND., Ixora parviflora, *Vahl.*
Rusty soap-nut, ENG., Sapindus rubiginosus, *Roxb.*
Ruttunjee, GUZ., Pterocarpus santalinus, *Linn.*

S

Saccopetalum tomentosum, *H. f. & Th.*, syn. of Uvaria tomentosa, *Roxb.*
Sachang, JAV., Cæsalpinia sappan, *Linn.*
Sack tree, ENG., Antiaris innoxia, *Blume.*
Sacred Indian fir, ENG., Cedrus deodara, *Loud.*
Sadachoo maram, TAM., Grewia tiliæfolia, *Vahl.*
Sadura, MAHR., Terminalia arjuna, *W. & A.*
Sælæ maram? TAM., Albizzia odoratissima, *Benth.*
Safeda, PANJAB, Dalbergia sissoo, *Roxb.*
Safeda, PANJ., Populus alba, *L.*, also Salix tetrasperma, *Roxb.*, also Populus fastigiata, *Cl.*, also Populus nigra, *L.*
Safed kikar, HIND., Acacia leucophlœa, *Willd.*
Safed simal, HIND., Eriodendron anfractuosum, *DC.*
Safed siris?? HIND., Albizzia elata.
Sagapu maram, TAM., Hymenodyction excelsum, *Wall.*
Sage-leaved alangium, ENG., Alangium lamarkii, *Thwaites.*
Saguerus rumphii, *Roxb.*, syn. of Arenga saccharifera, *Labill.*
Saguri maram, CAN., Schleichera trijuga, *Willd.*
Sagus konigii, Metroxylon sago.
Sagwan, HIND., Tectona grandis.
Sagwan, SPAN., Arenga saccharifera, *Labill.*
Sagwire, PORT., SPAN., Arenga saccharifera, *Labill.*
Sahadra, URIA, TEL., Trophis aspera, *Retz.*
Sahajo URIA, Terminalia glabra, *W. & A.*
Sai of Chamba, Deutzia staminea

Sai[illegible]ta, Beng., Acacia suma, *Buch.*
Sain-babul, Beng., Acacia tomentosa, *Willd.*
Sair, Mahr., also Sairi, Mahr., Bombax malabaricum, *DC.*
Saj, Ar., Shorea robusta, *Roxb.*
Saj, Mahr. of Nagpore, Terminalia tomentosa, *W. & A.*
Saj, Sein, Assein, Mahr., also Terminalia glabra, *W. & A.*
Sakar? Hind., Santalum album, *Linn.*
Sal, Hind., Mahr., Shorea robusta, *Roxb.*
Sala, Sans., Tel., Shorea robusta, *Roxb.*
Salai, Hind., Boswellia glabra, *Roxb.*, *W. & A.*
Salai, Hind., Boswellia thurifera, *Roxb.*
Sale, Tel., Acacia planiferons, *W. & A.*
Salix ichnostachya. *W. Ic.*, syn. of Salix tetrasperma, *Roxb.*
Salla also Sarl, Hindustani and Himalaya beyond the Panjab, Pinus longifolia, *Lamb.*
Sallur. Hind., Pinus webbiana, *Wall.*
Salmalia malabarica, *Schott. and Endt*, syn. of Bombax malabaricum, *DC.*, *W. & A.*
Salopa, Uria, Caryota urens, *Linn.*
Salsain-babula, Beng., Acacia tomentosa, *Willd.*
Salvadora persica, *L.*, syn. of Salvadora oleoides, *Dne.*
Salvadora persica, *Roxb.*, not *Linn.*, syn. of Salvadora indica, *Royle.*
Salvadora wightiana, Herb., *Hook.*, syn. of Salvadora indica, *Royle*, *Roxb.*, *W. Ic.*
Salwa, Uria, Shorea robusta, *Roxb.*
Samadera, Singh., Vitmannia trifolia.
Samandar, phal, Hind., Barringtonia acutangula, *Gærtn.*
Samadara-gass, Singh., Samadera indica, *Gærtn.*
Sambrani manu, Tel., Parkia biglandulosa.
Samgh-i-arabi, Pers., Acacia arabica, *Willd.*
Samme of Panjab, Stereospermum suaveolens.
Sampangam, Tam., Michelia rheedii, *Wight.*
Sampaghy, Can., Michelia champaca, *Linn.*
Sampanghy, Can., Michelia rheedii, *Wight.*
Sampanghy maram, Tam., Michelia rheedii, *Wight.*
Sampenga chettu, Tel., Michelia champaca, *Linn.*
Samstravadi, Maleal., Barringtonia racemosa, *Roxb.*
Samudra mara, Maleal., also Samudra maram, Tam., Barringtonia racemosa, *Roxb.*
Samya, Manilla., Cæsalpinia sappan, *Linn.*
Samyda canziala, *Buch.*, syn. of Casearia canziala, *Wall.*
Sanalinga patta, Tel., Cinnamomum zeylanicum, *Nees.*
Sanatta of Rawulpindi and Salt Range, Dodonæa burmanniana, *DC.*
Sanda-ku, Burm., Santalum album, *Linn.*
Sandal, Hind., Santalum album, *Linn.*
Sandal, Panjab, Fraxinus xanthoxylloides.
Sandal abiad, Ar., Santalum album, *Linn.*
Sandale, Fr., Santalum album, *Linn.*
Sandal-holz, Ger., Pterocarpus santalinus, *Linn.*
Sandalo, It., Santalum album, *Linn.*
Sandal safed, Pers., Santalum album, *Linn.*
Sandal sakar, Guz., Santalum album, *Linn.*
Sandal surkh, Pers., Pterocarpus santalinus, *Linn.*
Sandal wood, Eng., Santalum album, *Linn.*
Sandan, Singh., Santalum album, *Linn.*
Sandel, Duk., Santalum album, *Linn.*
Sandel-hout, Dan., Pterocarpus santalinus, *Linn.*
Sanders wood, Eng., Pterocarpus santalinus, *Linn.*
Sandolo-roso, It., Pterocarpus santalinus, *Linn.*
Sandra, Tel., Acacia sundra, *DC.*
Sandulay ka jhar, Duk., Elate sylvestris, *Linn.*
Sangar? Prosopis spicigera, *Linn.*, *W. & A.*
Sanjad, Panjab, Sanjata, Pushtu, Eleagnus conferta.
Sankæur, Gond., Albizzia odoratissima, *Benth.*
Sankhri? Prosopis spicigera, *Linn.*
Sanna neredu, Tel., Eugenia jambolana, *Lam.*
Santale-rouge, Fr., Eng., Pterocarpus santalinus, *L.*
Santea, Rawulpindi and Salt Range, Dodonæa burmanniana, *DC.*
Sanura of Panjab, Butea frondosa, *Roxb.*
Sapang, Malay, Cæsalpinia sappan, *Linn.*
Sa-phew, Burm., Xanthophyllum, *Species.*
Sapindus fraxinifolius, *DC.*, syn. S. rubiginosus, *R.*
Sapium sebiferum, *Roxb.*, syn. of Stillingia sebifera, *Willde.*
Sapota plum tree, Eng., Achras sapota, *Linn.*
Sappan wood, Eng., Cæsalpinia sappan, *Linn.*
Sappo milile? Singh., Vitex trifolia, *Linn.*
Sappoo, Singh., Michelia champaca, *Linn.*
Sapu (light) milila, Singh., Vitex altissima, *Linn.*
Sara, Tel., Buchanania intermedia, *Wight's Ic.*
Saraca arborescens, Burm., syn. of Jonesia asoka, *Roxb.*
Saraca indica, *Linn.*, syn. of Jonesia asoka, *Roxb.*
Sarakonne maram, Tam., Cassia fistula, *Linn.*
Sarala devadaru, Tel., Berrya ammonilla, *Roxb.*
Sara-puppoo, Tel., Buchanania latifolia, *Roxb.*
Saras, Duk., Cupressus glauca, also C. sempervirens, *Willde.*
Sarawan, Pushtu, Pistacia integerrima, *H.f. & Th.*
Sarĕi of Panjab, Raiyang of Kanawar, Abies smithiana, *Wall.*
Sarl —? Armeniaca vulgaris.
Sarlakhtei —? Andromeda ovalifolia, *Don.*
Sarnakassary mara, Can., Rottlera tinctoria, *Roxb.*
Saro, Hind., Pers., Cupressus sempervirens, *Willde.*
Sarul mara, Can., Bauhinia purpurea, *Linn.*
Sarv, Hind., Pers., Cupressus sempervirens, *Willde.*
Sarv ka jhar, Dek., Casuarina equisitifolia.
Sassafras, Arab, Eng., Fr., Ger., Lat., Sp., Sassafras wood.
Sassafraso, It., Sassafras wood.
Satin wood, Eng., Chloroxylon swietenia, *Roxb.*
Satrun, Panj., Quercus dilatata, *Lindl.*
Satwin, Mahr., Alstonia scholaris, *R. Br.*
Saul tree, Eng., Shorea robusta, *Roxb.*
Savura lodhra, Sans., Symplocos racemosa, *Roxb.*
Sawali, Kashmir, Alnus, *Sp.*
Sawn wood, Eng., Deals.
Saya, Mahr., Tectona grandis.
Saygun, Beng., Tectona grandis.
Sceura marina, *Forst.*, syn. of Avicennia tomentosa, *Linn.*
Schampakam, Maleal, Michelia champaca, *Linn.*
Schinus bengalensis, H. B., syn. of Icica indica, *W. & A.*
Schinus niara, H. B. syn. of Icica indica, *W. & A.*
Schinus saheria, H. B., syn. of Icica indica, *W. & A.*
Schleichera pubescens, *Roth.*, syn. of Schleichera trijuga, *Wild.*
Schrebera albens, *Retz.*, syn. of Elæodendron glaucum, *Pers.*
Sclerostylis arnottiana, *Wight Ic.*, syn. of Sclerostylis ceylanica, *Wight.*, *Ill.*
Scytalia longan, *Roxb.*, syn. of Nephelium longan, *Camb.*

CSL

[illegible] of Salt Range, Prosohis spicigera, *Linn.*
Sea coconut, Eng., Xylocarpus granatum, *Kœn.*
Seaforthia dicksonii, Mart., Areca dicksonii, *Roxb.*
Seb or Seu, or Palu, Hind., Pyrus malus, *Linn.*
Sebe mara, Can , Psidium pyriferum, *Linn.*
Sebestana domestica, *Lam.*, syn. of Cordia myxa, *Linn.*
Sebestana myxa, *Commel*, syn. of Cordia myxa, *L.*
Sebestana officinalis, *Gærtn*, Cordia myxa, *Linn.*
Sedgwickia cerasifolia, *Griff* syn. Liquidambar cerasifolia, *Wallich.*
Seduari, Hind., Vitex trifolia, *Linn.*
Seedless Bread-fruit, syn. of Artocarpus incisa.
Seet, Burm., Albizzia elata, also Albizzia lebbek, *Benth.*
Seevum, Hind., also Seevun, Mahr., Gmelina arborea, *Roxb.*
Segapoo munthari maram, Tam., Bauhinia purpurascens.
Segapu chandanum, Tam., Pterocarpus santalinus, *Linn.*
Segapu varnam, Tam., Psidium pomiferum, *Linn.*
Seh, Hind., Pinus smithiana, *Wall.*
Seho, Ter., Arenga saccharifera, *Sabil.*
Seiam-bala, Singh., Tamarindus indica, *Linn.*
Seil-i-majnoon, Hind., Salix babylonica, *Linn.*
Sein, Panjab, Terminalia tomentosa, *W. & A.*
Sein, also Assein of Nagpore T. glabra.
Sejanduna, Sans., Dalbergia oojeinensis, *Roxb.*
Sela-wunja, Tam., Albizzia odoratissima, *Benth.*
Selu, Sans., Cordia obliqua, *Willd.*
Selupa maram, Tam., Elæodendron roxburghii.
Semadoong, Pinus brunoniana, *Wall.*
Sembela, Tam., Cinnamomum iners, *Nees. Rein.*
Sembhalu, Hind., Vitex negundo, *Linn.*
Sembu linga maram, Tam., also Sembu linja maram, Tam., Sethia indica, *DC.*
Senacia glauca, *Lam.*, syn of Elæodendron glaucum, *Pers.*
Senacia nepalensis, syn. of Pittosporum floribundum, *W. & A.*
Sendh ka jar, Hind., Phœnix sylvestris, *Roxb.*
Sendi ka jar, Duk., Elate sylvestris, *Linn.*
Sengarary maram, Tam., Canthium parviflorum, *Lam.*
Sephalica, Sans., Nyctanthes arbor-tristis, *Linn.*
Sepalika-gaha, Singh., Nyctanthes arbor-tristis, *Linn.*
Sepala, Singh., Nyctanthes arbor-tristis, *Linn.*
Sepistan plum tree, Eng., Cordia myxa, *Linn.*
Seran of Kangra, *Panjab.*, Acer creticum, *Linn.*
Seriou-lout, Malay., Pterospermum indicum, *Wall.*
Serva chettu, Tel., Casuarina equisitifolia.
Sesbania coccinea, *Willde*, syn. of Agati grandiflorum, *Desv.*
Sesso, Hind., Dalbergia acuminata, *Ains.*
Seesoo, Mahr., Dalbergia latifolia, *Roxb.*
Sessu tree, Anglo-Hind., Dalbergia acuminata, *Ains.*
Sewun, Duk., Gmelina arborea, *Roxb.*
Seyr-tej., Mahr., Euphorbia tiraculli, *Linn.*
Sha, Burm., Acacia catechu, *Willd.*
Sha, of Kanawar, Fothergillia involucrata.
Sha-bin, Burm., Acacia catechu, *Willd.*
Shaffar of Kanawar, also Shafri, Panj., Syringa emodi, *Wall.*
Shah baloot, Pushtu, Quercus ilex, *Linn.*
Shajr, Ar., Tree.
Shajr ul Hyat, Arab., Cupressus sempervirens, *Willde.*
Shajr-ul-jin, Ar., Erythroxylon areolatum ?
Shaka, Panj., Cornus macrophylla, *Wall.*
Shakhool, Pers., Cytisus cajan, *Linn.*
Shaldoona of Jubbulpore ? ? Tectona grandis.
Shalmali, Sans., Bombax malabaricum, *DC.*
Shami, Beng., Prosopis spicigera, *Linn.*
Shamicula, Mahr., Eriodendron anfractuosum, *DC.*
Shan of Kanawar, Salix, *Sp.*
Shandanam, Tam., Santalum album, *Linn.*, *Roxb.*
Shang, Panjab, Fraxinus xanthoxylloides.
Shangal, Panjab, Fraxinus xanthoxylloides.
Shangar—? Prosopis spicigera, *Linn.*
Shari, Beas, Prunus armeniaca.
Sharoi of Bias, also Sharoli of Bias, Sutlej, Corylus colurna, *L.*
Shasa-gach'h Beng., Trophis aspera, *Retz.*
Shayng cottay maram, Tam., Semecarpus anacardium, *Linn.*
Shayrang cottay, Tam., Semecarpus anacardium, *Linn.*
Shegopu munthari maram, Tam., Bauhinia purpurea. *Linn.*
Shegul, Shogal of Sutlej, Hurdwar and Chamba, Pyrus variolosa, *Wall.*
Shekram, Tam., Albizzia amara, *Boivin.*
Shembugha maram, Tam., Michelia champaca *Linn.* also Michelia nilagirica. *W. Ic.*
Shem maram, Tam., Soymida febrifuga, *Ad. Juss.*
Shendri, Duk., Mahr., Rottlera tinctoria, *Roxb.*
Sheora, Beng., Trophis aspera, *Retz.*
Sher of Jhelum, Pyrus malus, *Linn.*
Shere of Kanawar, Coriaria nepalensis.
Sheshum of Central India, Dalbergia latifolia, *R.*
Shewun, Mahr., Gmelina arborea, *Roxb.*
Shia, Panjab, Dalbergia sissoo, *Roxb.*
Shikari mewa of Kohat, Grewia betulæfolia, *Juss.*
Shilli, Panjab, Fraxinus xanthoxylloides.
Shimti, Can., Odina wodier, *Roxb.*
Shindar, Panj., Quercus incana.
Shinduga, Tel., Albizzia odoratissima, *Benth.*
Shin, Panjab, Dalbergia sissoo, *Roxb.*
Shing, Panjab, Fraxinus floribundus, *Wall.*
Shingra, Hind., Quercus prinoides, *Linn.*
Shir khist, Fraxinus, *Species*, its Manna.
Shirin, of Kanawar, Acacia julibrissin.
Shishai, Panjab, Dalbergia sissoo, *Roxb.*
Shittim wood of the Bible, Acacia arabica, *Willd.*
Shko of Kanawar, Ulmus campestris, *L.*, also U. erosa and U. pumila, *Pall.*
Shne, Panjab, Pistacia integerrima, *H. f. & Th.* also Pushtu, Pistacia terebinthus.
Shrol, Hazara, Alnus nepalensis.
Shola, Hind., Æschynomene aspera, *Linn.*
Shom shing, Som of Lahaul, Pinus excelsa, *Wall.*
Shorea talura, *Roxb.*, syn of Shorea laccifera, *Heyne.*
Shorea robusta, *Roth.*, not *Roxb.*, syn. of Shorea laccifera, *Heyne.*
Shukpa,or Yukpa,or Pratakpa,Tibetan,Juniperus excelsa, *Bieb.*
Shumaj, Panj., Buxus sempervirens, *L.*
Shumbali, Duk., Vitex negundo, *Linn.*
Shumshad, Panj., Buxus sempervirens *L.*
Shunda pana, Malеal., Caryota urens, *Linn.*
Shunnu, Panjab, Fraxinus floribundus, *Wall.*
Shur, Surghu, Lewar, of Chenab,Mewar of Kanawar, Juniperus excelsa, *Bieb.*

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Sh[illegible] of Sutlej, Corylus colurna, *L.*
Shurungra, PANJ., Albizzia lebbek, *Benth.*
Shutur-khar, HIND., Persian ? ? Alhagi maurorum, *Tourne.*
Shwan, PANJ., Olea europæa, *L.*
Shwet sal, BENG., Dalbergia latifolia, *Roxb.*, *W. & A.*
Shwet shimool, BENG., Eriodendron anfractuosum, *DC.*
Shyalee, URIA, Bauhinia vahlii.
Siah chob, PUSHT., Fraxinus, *Species.*
Sialu, on the Wurdwan, Kashmir, Marlea begonifolia, *Roxb.*
Siapangam, MALEAL., Michelia rheedii, *Wight.*
Sibukas, TAG., Cæsalpinia sappan, *Linn.*, *Roxb.*
Sichu of Salt Range, Cotoneaster obtusa, *Wall.*
Sidalam, TEL., Corypha umbraculifera, *Linn.*
Sigembela, SINGH., Tamarindus indica, *Linn.*
Siharu, PANJAB, Nussiessya hypoleuca.
Siji, MALAY, Arenga saccharifera
Siju, PANJAB, Fraxinus xanthoxylloides.
Sikhi of Murree also Siki, PANJAB, Euonymus fimbriata, *Wall.*
Silein, Alnus, *Sp.*
Silver fir, ENG., Pinus brunoniana, *Wall.*, also Picea webbiana, *Lamb.*
Sima chinta, TEL., Inga dulcis, *Willde.*
Sima ippa chettu, TEL., Achras sapota, *Linn.*
Sima jiluga, TEL., Parkinsonia aculeata, *Linn.*
Simal, SANS., Bombax malabaricum, *DC.*
Sima natti, TAM., Sethia indica, *DC.*
Simao-manis, MALAY, Citrus aurantium, *Linn.*
Simbal, HIND., PER., Bombax malabaricum, *DC.*
Sime Ilupai maram, TAM., Achras sapota, *Linn.*
Simrung of Kanawar, Rhododendron campanulatum.
Sina naga, TAM., Eugenia jambolana, *Lam.*
Sinapis, GR., Salvadora persica, *Linn.*
Sidhera, PANJAB, Euonymus fimbriata, *Wall.*
Sindhuka, SANS., Vitex negundo, *Linn.*
Sindica, ENG., Diospyros embryopteris, *Persoon.*
Sinduri chettu, TEL., Rottlera tinctoria, *Roxb.*
Sinduva chettu, TEL., Albizzia lebbek, *Benth.*
Sinduvara, SANS., Vitex trifolia, *Linn.*
Sinduya, SANS., Vitex negundo, *Linn.*
Sinjli, Kaghan, Zizyphus flexuosa.
Sira, PANJ., Chionanthus, *Species.*
Siri, PANJ., Albizzia lebbek, *Benth.*, also A. odoratissima, *Benth.*
Siri manu, TEL., Conocarpus latifolia, *Roxb.*
Sirin of the *Panjab*, Albizzia stipulata, *Boiv.*
Sirisha, BENG., SANS., Albizzia lebbek, *Benth.*
Sirissa tree, ENG., Sirissee, URIA, Sirris, HIND., PANJ., Albizzia lebbek, *Benth.*
Sirris, MAHR., Albizzia odoratissima, *Benth.*
Sirru naga, TAM., Eugenia jambolana, *Lam.*
Sirsa, HIND., Albizzia odoratissima, *Benth.*
Sisam, GUZ., HIND., Black wood.
Sissa, CAN., Dalbergia acuminata, *Ains.*
Sissoo, TEL., Dalbergia sissoo, *Roxb.*
Sissoo wood, ENG., Dalbergia sissoo, *Roxb.*
Sissowa, URIA ? Dalbergia sissoo, *Roxb. Fl. Ind.*
Sissu, HIND., Dalbergia sissoo, *Roxb. Fl. Ind.*
Sitodium cauliflorum, *Gært.*, Artocarpus integrifolia, *Linn.*
Sit Sal, BENG., HIND., Black wood, Dalbergia latifolia, *Roxb.*, *W. & A.*
Sizygium salicifolium. *Wall*, syn. of Eugenia salicifolia, *Roxb.*
Small Jack, ENG., Artocarpus lakoocha, *Roxb.*
Snake poison nut tree, ENG., also Snake wood tree, ENG., Strychnos colubrina, *Linn.*, also Strychnos nux vomica, *Linn.*, *Roxb.*
Soap-nut, ENG., Sapindus acuminatus, *Wallich*, also Sapindus emarginatus, *Vahl.*
Soap nut tree ENG., Sapindus emarginatus, *Vahl.*
Soccus lanosus, S. granosus, S. sylvestris, *Rumph.*, syn. of Artocarpus incisa, *Linn.*, *Fil.*
Sohn, URIA., Cornus oblonga, *Wall.*
Sola, HIND., Æschynomene aspera, *Linn.*
Somendilla, SINGH., Berrya ammonilla, *Roxb.*
Somida manu, TEL., Soymida febrifuga, *A. J.*
Sominta, TEL., Sesbania ægyptiaca, *Pers.*
Sona, HIND., Bauhinia variegata, *Linn.*
Sonalu, BENG., Cassia fistula,
Sondali, BENG., Cassia fistula, *Linn.*
Soodoo Nikka gass, SINGH., Vitex negundo, *Linn.*
Soonaree, URIA., Cassia fistula, *Linn.*
Sooncuishla, TEL., Poinciana elata, *Linn.*
Soondoo Kadoombaireya gass, SINGH., Diospyros sylvatica, *Roxb.*
Soondree, BENG., Heritiera minor, *Lam.*
Soondoro-gundi, URIA, Rottlera tinctoria, *Roxb.*
Soorpunni, CAN., Calysaccion angustifolia.
Soovanda-gass, SINGH., Kayea stylosa, *Thw.*
Soowndee Cottay, TAM., Ixora parviflora, *Vahl.*
Soringhi ? Shorea robusta, *Roxb.*
Sorrowful nyctanthes, ENG., Nyctanthes arbortristis, *Linn.*
Soum, EGYPT, Balanites ægyptiaca, *Delile.*
Soung-ga-læ, BURM., Ancistrolobus carneus, *Wall.*
Sounder, MAHR., Prosopis spicigera, *Linn.*
Sour sonneratia, ENG., Sonneratia acida, *Willde.*
Southwellia angustifolia, syn. of Sterculia angustifolia, *Roxb.*
Southwellia balanghas, *Sch. and End.*, Sterculia balanghas, *Linn.*
Southwellia parviflora, syn. of Sterculia parviflora, *Roxb.*
Sowendee cuttay, Tam. of Ceylon, Ixora parviflora, *Vahl.*
Spathodea chelonoides *DC. Prod.*, syn. of Stereospermum chelonoides, *W. Ic.*, *DC.*
Spathodea Indica, PERS., syn. of Calosanthes indica, *Blainv.*
Spathodea longifolia, *Vent.*, syn. of Spathodea rheedii, *Spreng.*
Spathodea Roxburghii, *Spreng.*, syn. of Bignonia quadrilocularis, *Roxb.*
Spathodea stipulata, *Wall.*, syn. Bignonia stipulata, *Roxb.*
Sper cherai, PUSHTU, Quercus incana or white oak.
Spercherei of Kanawar, Quercus ilex, *Linn.*
Spelda or Speldor, TRANS-INDUS, Populus alba, *L.*
Sphærosacme rohituku, *Wall.*, syn. of Amoora rohituku, *W. & A.*
Sphœrocarya Wallichiana, *W. Ic.*, syn. of Pyrularia wallichiana, *A. D.*
Sphragidia Zeylanica, *Thw.*, syn. of Cyclostemon zeylanicum, *Bail.*
Spilecha, PUSHTU, Fothergillia involucrata.
Spondias amra, *Ham.*, syn. of Spondias mangifera, *Pers.*
Spondias amara, *Lam.*, syn. of Spondias mangefira, *Pers.*
Spondias cytheræa, *Sonn.*, syn. of Spondis dulcis, *Forst.*
Spondias elliptica, *Rottl.*, syn. of Buchanania latifolia, *Roxb.*

Spondias paniculata, *Roxb.*,’ syn. of Spondias mangifera, *Pers.*
Spondias simplicifolia, *Rottl.*, syn. of Buchanania angustifolia, *Roxb.*
Spruce fir, Eng., Picea webbiana, *Lamb.*
Spulmei, Pushtu, Calotropis procera, R. *Br.*
Spyng, Kanawar, Arundinaria utilis.
Sri-ganda, Can., Santalum album, *Linn.*, *Roxb.*
Sri talam, Sans., Corypha taliera, *Roxb.*
Srol ; Shrol, Jhelum and Kashmir, Alnus, *Sp.*
Stadmannia trijuga, *Spreng*, syn. of Schleichera trijuga, *Willd.*
Stalagmitis pictorius, *G. Don.*, syn. of Xanthochymus pictorius, *Roxb.*
Star apple, Eng., Chrysophyllum roxburghii, *Don.*
Stemonoporus wightii, *Thw.*, syn. of Vateria ceylanica, *Wight Ill.*
Stilago bunias, *Linn.*, *Roxb.*, syn. of Antidesma bunias, *Spreng.*
Stilago diandra, *Roxb.*, syn. of Antidesma diandrum.
Stotulari, Sans., Lagerstrœmia reginæ, *Roxb.*
Stravadium coccineum *DC.*, syn. of Barringtonia acutangula, *Gærtn.*
Stravadium rubrum, *DC.*, syn. of Barringtonia acutangula, *Gærtn.*
Streblus asper, *Lour.*, syn., of Trophis aspera, *Retz.*
Stylodiscus trifoliatus, *Bennett*, syn. of Andrachne trifoliata, *Roxb.*, also syn. of Bischofia roeperianus, *Blume*, *W. Ic.*
Sudu-leyang-gas, Singh., Prosorus cyanospermum, *Thw.*
Sufed, Panj., Buxus sempervirens, *L.*
Sui of Panj., Albizzia odoratissima, *Benth.*
Suk-chaina, Hind., Pongamia glabra, *Vent.*
Sukun, Malay, Artocarpus integrifolia, *Linn.*
Sullah, Hind., Pinus longifolia, *Lamb.*
Sultana champa, Beng., Hind., Calophyllum inophyllum, *Linn.*, *Roxb.*
Sum of Panjab, Bombax malabaricum, *DC.*, also Ehretia serrata, *Roxb.*, also Fraxinus floribundus, *Wall.*
Sumi, Tel., Soymida febrifuga, *Ad. Juss.*
Sumra of Hushyarpur, Syzigium jambolanum, *DC.*, (the wild tree).
Sumug arabi, Ar., Acacia arabica, *Willde.*
Sun ? Duk., Briedelia spinosa, *Willde.*
Sunari, Tel., Ochna squarrosa, *Willde.*
Sundal-ul-ahmar, Ar., Peterocarpus santalinus, *Linn.*
Sundul sukur, Guz., Santalum album, *Linn.*
Sundun, Ar., Pterocarpus santalinus, *Linn.*
Sung, Hind., Eugenia acris, *W. & A.*
Sungal, N. W. Him., Abies smithiana, *Wall.*
Sunnu, Panjab, Fraxinus floribundus, *Wall.*
Suola mara, Can., Cedrela toona, *Roxb.*
Supari, Hind., Areca catechu, *Linn.*
Supari-am, Hind., Psidium pyriferum, *Linn.*
Supeari, Duk., Areca catechu, *Linn.*
Supiri-am, Hind., Psidium pyriferum, *Linn.*
Surai of Kamaon, Cupressus torulosa, *Don.*
Surangra of Panjab, Albizzia stipulata, *Boiv.*
Sura ponna, Tel., Calysaccion longifolia, *Roxb.*
Surch of Sutlej valley, Hippophaæ salicifolia.
Suriya mara, Singh, Albizzia lebbek.
Surja of the Panjab, Eleagnus conferta.
Surpa ? Mahr., Memecylon tinctorium, *Kon.*
Surpun ka jhar, Hind., Calophyllum inophyllum, *Linn.*
Surree mara, Singh, Albizzia odoratissima, *Benth.*
Surrul, Hind., Pinus longifolia, *Lamb.*
Sur sanjli, Panj., Cratægus oxyacantha, *Linn.*
Surya-gass, Singh, Thespesia populnea, *Lam.*
Suto of Kanawar, Hippophaæ salicifolia.
Suvarnam, Sans., Tel., Cassia fistula, *Linn.*
Suvarnam, Tel., Mesua ferrea, *Linn.*
Suvarnuka, Sans., Cassia fistula, *Linn.*
Sweet inga, Eng., Inga dulcis, *Willde.*
Sweet orange, Eng., Citrus aurantium, *Linn.*
Sweta sal ? Hind. ? Dalbergia latifolia, *Roxb.*
Sweta-shala, Duk. ? ? Dalbergia latifolia, *Roxb.*
Swietenia chickrassa, *Roxb.*, syn. of Chickrassia tabularis, *Ad. Juss.* Chittagong-wood.
Swietenia chloroxylon, *Roxb.*, syn. of Chloroxylon swietenia, *Roxb.*
Swietenia febrifuga, R*ox*b. also Swietenia rubra, *Rottler*, syn. of Soymida febrifuga, *Ad. Juss.*
Switch sorrel, Eng., Dodonæa burmanniana, *DC.*
Syalita, Maleal., Dillenia speciosa, *Thunb.*
Syzigium caryophyllifolium, *DC.*, syn. of Eugenia jambolana, *Lam.*
Syzigium jambolanum, *DC.*, syn. of Eugenia jambolana, *Lam.*

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Tabernæmontana citrifolia, *Gibson*, syn. of Tabernæmontana dichotoma, *Roxb.*
Tada pallu, Tel., Ixora parviflora, *Vahl.*
Tadi chettu, Tel., Terminalia belerica, *Roxb.*
Taddi, Tam., also Taddo, Tam., Pterospermum suberifolium, *Lam.*
Tadrelu balel of Kashmir, Coriaria nepalensis.
Tadru of Jumna, Rhamnus purpureus, *Royle.*
Tagada, Tel., Stereospermum chelonoides, *W. I.*
Tagho, Panj., Celtis nepalensis, *Planch.*
Taghun ; takpun, Pusht., Celtis caucasica, *Willde.*
Tai, Burm. ? Ebony, Diospyros, *Species.*
Taila-oon, Burm., Carapa.
Tai maram, Tam., Diospyros ebenum, *Linn.*
Taindu, Duk., Mimusops elengi, *Linn.*
Taitan, Tam., Strychnos potatorum, *L.*, *Willde.*
Tala, Sans., Borassus flabelliformis, *Linn.*
Talagaha, Singh., Corypha umbraculifera, *Linn.*
Talara, Tam., Shorea laccifera, *Heyne.*
Talathi maram, Tam., Grewia tiliæfolia, *Vahl.*
Tal-gach'h, Beng., Borassus flabelliformis, *Linn.*
Talgaha, Singh., Borassus flabelliformis, *Linn.*
Tali, Beng., Corypha umbraculifera, *Linn.*
Tali, also Shisam and Sisam of Panjab, Dalbergia sissoo, *Roxb. Fl. Ind.*
Taliennoe, Burm., Chaulmoogra odorata.
Taliera, Beng. Hind., Corypha taliera, *Roxb.*
Taliera Bengalensis, *Spreng*, syn, of Corypha taliera, *Roxb.*
Taliera elata, *Wall.*, syn, of Corypha elata, *Roxb.*
Talipat palm, Eng., also Talipat, Singh., Corypha taliera, *Roxb.*
Talipot palm, Eng., Corypha umbraculifera, *Linn.*
Talisha, Sans., Flacourtia cataphracta, *Roxb.*
Talishapatri, Tam., Talishupatri, Maleal., Talishputri, Beng., Hind., Flacourtia cataphracta *R.*
Tallow tree of China, Eng., Stillingia sebifera, *Willde.*

Talo[illegible], Sans., Cassia auriculata.
Talsapatri, Tel. Beng., Flacourtia cataphracta, *Roxb.*
Talsar, Panjab., Rhododendron lepidotum.
Tamalama, Tel., Xanthochymus pictorius, *Roxb.*
Taman, Tam., Mischodon zeylanicus, *Thw.*
Tamanu of Tahiti, Calophyllum inophyllum, *L.*
Tamara-tonga, Maleal., Averrhoa carambola, *Linn.*
Tamarinden, Ger., Tamarindus indica, *Linn.*
Tamr-i-hindi, Pers., Tamarindus indica, *Linn.*
Tamarindo, It., Sp., Tamarindus indica, *Linn.*
Tamarind-tree, Eng., Tamarindus indica, *Linn.*
Tamarindus occidentalis, *Gærtn*, syn. of Tamarindus indica, *Linn.*
Tamarindus officinalis, *Hooker*, syn. of Tamarindus indica, *Linn.*
Tamarins, Fr., Tamarindus indica, *Linn.*
Tamarix epacroides, *Linn.*, syn. of Tamarix gallica, *Linn.*
Tamarix indica, *Willde*, syn. of Tamarix gallica, *Linn.*
Tamarta chettu, Tel., Averrhoa carambola, *Linn.*
Tamartam maram, Tam., Averrhoa carambola, *Linn.*
Tamayoke, Burm., Rondeletia tinctoria, *McCl.*
Tambachi maram, Tam., Ulmus integrifolia, *Roxb.*
Tambeleya, Singh., Eugenia willdenovii, *DC.*
Tambul, Malay., Artocarpus integrifolia, *Linn.*
Tambut, Mahr., Hocomlia montana.
Tamiay of Sutlej and Ravi, Alhagi maurorum, *Tourne.*
Tampooni, Malay., Artocarpus echinata, *Roxb.*
Tanaku, Tam., Cochlospermum gossypium, *DC.*
Tandai, Chenab, Albizzia odoratissima, *Benth.*
Tandi maram, Tam., Terminalia belerica, *Roxb.*
Tangada kurra, Tel., also Tangada wood, Ang.-Tel., also Tangedu, Tel., Cassia auriculata.
Tangedu, Tel., Inga xylocarpa, *DC.*
Tangha, Maleal., the nut of Cocos nucifera, *Linn.*
Tanghai? or Tangul, Malay? Ægle marmelos.
Tanghani, Uria., Cassia, *Species.*
Tang, Tangi, Shindar of Kangra, Pyrus variolosa, *Wall.*
Tanhari, Panjab, Pistacia integerrima, *H. f. & Th.*
Tan-heong, Chin., Santalum album, *Linn.*
Tani, Maleal., Terminalia belerica, *Roxb.*, also Terminalia rubrica?
Tani maram, Tam., Terminalia belerica, *Roxb.*
Tan-muh, Chin., Santalum album, *Linn.*
Tannu, Ben., Burm., Artocarpus *Species.*
Taunana, Mahr., Lagerstrœmia reginæ, *Roxb.*
Tantheya, Burm., Hopea floribunda.
Tantisa, Tel., Schmidelia serrata, *DC.*
Tanuko, Tam., Gyrocarpus jacquini, *Roxb.*
Ta-nyen, Burm., Inga bigemina, *Willde.*
Tapia, Hind., Cratæva nurvala, *Buch. Ham.*
Tapia, Sans., Cratæva roxburghii, *R. Br.*
Tara, Beng., Corypha taliera, *Roxb.*
Tarana, Singh., Stylocoryna webera, *A. Rich.*
Tareice, Pol., Deals.
Tarenna Zeylanica, *Gærtn.*, syn. of Stylocoryna webera, A. *Rich.*
Tari, Duk., Tel., Borassus flabelliformis, *Linn.*
Tariat, Beng., Corypha taliera, *Roxb.*
Taringi, Can., Calysaccion longifolia, *Roxb.*
Tar-ka-jhar, Hind., Borassus flabelliformis, *Linn.*
Tar-ra-phee, Burm., Calophyllum, *Species.*
Tarrene, Singh, Webera cerifera.
Tarsee, Mahr., Chrysophyllum roxburghii, *Don.*
Tarum of Pliny, Lat., Eagle wood.
Ta-soung-let-wah, Burm., Juglans tricocca, *McL.*
Tata, Sans., Borassus flabelliformis, *Linn.*, *Rheede.*
Tati aku, Tel., Cadjan, Malay.
Tati nara, Tel., Borassus flabelliformis, *Linn.*
Tati pandu, Tel., Borassus flabelliformis, *Linn.*
Tatri, Titri, Tetar, Chechar, of Jhullundhur, Chenab, Ravi, Sutlej, Rhus buckiamela, *Roxb.*
Tatti chettu, Tel., Borassus flabelliformis, *Rheede.*
Tatti kullu, Tel., Borassus flabelliformis, toddy.
Tattu chettu karra, Tel., Borassus flabelliformis.
Tattua of Chenab, Prinsepia utilis, *Royle.*
Tau, Panjab, Grislea tomentosa, *Roxb.*
Taudra maram, Tam., Terminalia rubrica?
Taulika, Tel., Schmidelia serrata, *DC. W. & A.*
Taur, Hills of Panjab, Bauhinia racemosa, *Lam.*
Tavatike, Tel., Schmidelia serrata, *DC.*, *W. & A.*
Tavole, It., Deals.
Tavoy red wood, Eng., Syndesmis tavoyana, *Wall.*
Tawi, Panjab, Grislea tomentosa, *Roxb.*
Taw-sa thayet, Burm., Mangifera attenuata,
Taw-the-din-bin, Burm., Ricinus dicoccus, *Roxb.*
Tecoma suaveolens, *G. Don.*, syn. of Stereospermum suaveolens, *W. Ic.*
Tecoma undulata, *G. Don.*, syn. of Bignonia undulata, *Roxb.*
Tecoma xylocarpa, *G. Don.*, syn. of Bignonia xylocarpa, *Roxb.*
Tectona hamiltonia, *Wall.*, syn. of Tectona ternifolia, *Buch.*
Tedda pala, Tel., Ixora parviflora, *Vahl.*
Tedla pala, Tel., Wrightia tinctoria, *R. Brown.*
Teemboorni, Mahr., Diospyros montana, *Roxb.*
Teemroo, Mahr., Diospyros montana, *Roxb.*
Teggu muda, Tel., Gmelina arborea, *Roxb.*
Tein n'gyet, Burm., Cæsalpinia sappan, *Linn.*, *Roxb.*
Teku chettu, Tel., Tectona grandis.
Tek maram, Tam., Tectona grandis.
Tel-domba-gaha, Singh., Calophyllum inophyllum, *Linn.*
Telega, Tel., Gardenia, *Species.*
Telembhoo, Singh., Sterculia fœtida, *Linn.*
Tella barranki, Tel., Ficus asperrima, *Roxb.*, also Ficus benjamina, *Linn.*
Tella chandra, Tel., Acacia suma, *Buch.*
Tella chettu, Tel., Excœcaria agallocha, *Linn.*
Tella-giniya chettu, Tel., Alhagi maurorum, *Tourne.*
Tella Irugudu, Tel., Dalbergia latifolia, *Roxb.*
Tella kaka mushtee, Tel., Sponia? *Species.*
Tella keeriya gass, Singh., Excœcaria agallocha *Linn.*
Tella kooroowan, Tel., Ixora, *Species.*
Tella korinda, Tel., Acacia cæsia, *W. & A.*
Tella manga, Tel., Gardenia lucida, *Roxb.*
Tella marda, Tam., Terminalia arjuna, *W. & A.*
Tella moduga, Tel., Butea frondosa, *Roxb.*
Tella motuku, Tel., Dalbergia oojeinensis, *Roxb.*
Tella neredu chettu, Tel., Conocarpus latifolia, *Roxb.*
Tella pachchari, Tel., Dalbergia paniculata, *Roxb.*
Tella patsaroo, Tel., Dalbergia paniculata, *Roxb.*
Tella ponuku, Tel., also Tella poonkee, Tel., Givottia rottleriformis, *Griff.*
Tella sopra, Tel., also Tella sopara, Tel., Albizzia elata, also Albizzia procera, *Benth.*
Tella-tumma, Acacia leucophlœa, *Willd.*
Tella ulimara chettu, Tel., Cratæva roxburghii, *R. Br.*

Tel[illegible]ulamide, Tel., Cratæva roxburghii, *R. Br.*
Te[illegible]avili, Tel., Vitex trifolia, *Linn.*
Tella yiragudu, Tel., Dalbergia latifolia, *Roxb.*
Tel-mee-gaha. Singh., Bassia longifolia, *Linn.*
Telsu, Tel., Albizzia odoratissima, *Benth.*
Tenasserim mahogany, Eng., Pterocarpus dalbergioides, *Roxb.*
Tendu, Hind., Diospyros melanoxylon, *Roxb.*, also D. tomentosa, *Roxb.*, also D. lanceolata, also ebenum, *Linn.*
Tenga, Maleal., Cocos nucifera, *Linn.*
Tengai, Tam., The nut, Cocos nucifera, *Linn.*
Tendua, Hind., Diospyros ebenum, *Linn.*
Tenkaia chettu, Cocos nucifera, *Linn.*
Tenna maram, Tam., Cocos nucifera, *Linn.*
Tennam ole, Tam., Cadjan, Malay.
Tennus, Mahr., Dalbergia oojeinensis, *Roxb.*
Tentara, Uria, Ghoralanjea, Uria.
Terminalia berryi, *W. & A.* syn. of Terminalia arjuna, *W. & A.*
Terminalia crenulata, *DC.*, syn. of Terminalia glabra, *W. & A.*
Terminalia intermedia, *Spr.*, syn. of Terminalia catappa, *Linn.*
Terminalia moluccana, *Lam.*, syn of Terminalia catappa, *Linn.*
Terminalia myrobalanus citrina, syn. of Terminalia chebula, *Retz.*
Terminalia myrobalana, *Roth.*, syn. of Terminalia catappa, *Linn.*
Terminalia punctata, *Roth.*, syn. of Terminalia belerica, *Roxb.*
Terminalia reticulata, *Roth.*, syn. of Terminalia chebula, *Retz.*
Terminalia subcordata, *Willde*, syn. of Terminalia catappa, *Linn.*
Terminalia tomentosa, *Roxb.*, syn. of Terminalia alata, *Ainslie.*
Tesu, Duk., flowers of Butea frondosa, *Roxb.*
Tetranthera apetala, *Roxb.*, syn. of Tetranthera, *Sp.*
Tetranthera monopetala, syn. of Tetranthera, *Sp.*
Tettam parel maram, Maleal., Strychnos potatorum, *L.*
Tettau cottay maram, Tam., Strychnos potatorum, *L. Willde.*
Tevus, Mahr., Dalbergia oojeinensis, *Roxb.*
Tezbul, Hind. Xanthoxylon hostile, seeds, bark.
Thab of Hushyarpur, Hymenodyction excelsum.
Tha-boot-kyee, Burm., Meliusa velutina, *H. f. & T.*
Thabsi, Tel., Sterculia urens, *Roxb.*
Tha bya, Burm., Eugenia, *Species.*
Tha-byai-ywet-kya, Burm., Casuaria pomandra ?
Tha-byai-ywet-kya, Burm., Cascaria pentandra ?
Thab-yeh-gah., Burm., Eugenia caryophyllifolia, *Roxb.*
Thab-yeh-gjo, Burm., Eugenia obtusifolia, *Roxb.*
Thab-yeh-tha-pan, Burm., Eugenia, *Species.*
Thab yew, Burm., also Thab-yoo, Burm., Dillenia speciosa, *Thunb.*
Thaeet-tha, Burm., Albizzia elata.
Tha-khoot-ma, Burm., Spathodea rheedii, *Spreng*
Tha-koop-poo, Burm., Stereospermum chelonoides, *W. Ic.*
Thalei, Burm. Ulmus alternifolia, *McClelland*, also U. integrifolia, *Roxb.*
Thaly marathu, Can., Sapindus emarginatus, *Vahl.*
Tha-ma-jam-wai-zoke, Burm., Pterospermum aceroides, *Wall.*
Thamman, Panjab, Grewia oppositifolia, *Buch.*
Than, also Thani, of Chenab and Lahoul, Juglans regia, *Linn.*
Tha-nat, Burm., Cordia myxa, *Linn.*
Than-day, Burm., Bignonia, *Species.*
Thangi of Ravi, Corylus colurna, *L.*
Thangoli, Chenab, Corylus colurna, *L.*
Thansa, Hind., Pinus longifolia, *Lamb.*
Tha-pya, Burm., Dalbergia, *Species.*
Tha-ra-bi, Burm., Calophyllum longifolium.
Tha-ran, Burm., Grewia, *Species.*
Tha-ra-phee, Burm., Calophyllum, *Species.*
Tharnel, Panj., Benthamia fragifera, *Lindl.*
Tharra, Tel., Grewia tiliæfolia, *Vahl.*, *W. Ic.*
Tharwar, Panj., Benthamia fragifera, *Lindl.*
That-pan, Burm., Bombax, *Species.*
Tha-thee, Burm., Bignonia, *Species.*
That-yat, Burm., Mangifera indica, *Linn.*
Thaumma, Burm., Sonneratia, *Species*
Thaun, Burm., Eurya, *Species.*
Thayat-pew-tha, Burm., Sibia glomerata.
Thee-bew-tha, Burm., Dillenia speciosa, *Thunb.*
Theer-vala-connai, Tam., Bauhinia tomentosa, *L.*
Theet-khya, Burm., Castanea indica.
Theet-min, Burm., Podocarpus neriifolia.
The-ho-thayet, Burm., Anacardium occidentale, *Linn.*
Theit-to, Burm., Sandoricum indicum, *Cav.*
Theli of Kanawar, Juniperus squamosa.
Thelli, Maleal., Canarium strictum, *Roxb.*
Them-bau-ka-ma-kah, Burm., Azadirachta indica, *Ad. Juss.*
The-ra-pi, Burm., Calophyllum longifolium.
Thesi, Panj., Benthamia fragifera, *Lindl.*
Thetta maram, Tam., Strychnos potatorum, *L.*
Thet ya, Burm., Gardenia floribunda.
Thevatharu, Tam., Guatteria longifolia, *Wall.*
Thevus, Hind., Mahr., Dalbergia, *Species*
Thevus of Nagpore, Dalbergia oojeinensis, *Roxb.*
Theya, Burm., Shorea obtusa, *Wall.*
Thi-ka-doo, Burm., Sterculia, *Species*
Thit kya, Burm., Juglans regia, *Linn*
Thin-ga-doe, Burm., Hopea, *Sp.*
Thingan, Burm., Hopea odorata, *Roxb.*
Thin-win, Burm., Pongamia, *Species, Brandis*
Thissa of Jhullundhur, Rhus buckiamela, *Roxb.*
Thit-ha, Burm., Timber.
Thit-ka-do. Burm., Cedrela toona, *Roxb.*
Thit-kya, Burm., Quercus semiserrata, *Roxb.*
Thit-lin-da, Burm., Spathodea, *Species.*
Thit-nya, Burm., Castanea martabanica.
Thit-pa-gan, Burm., Pongamia, *Species, Brandis.*
Thitpyoo, Burm., Lagerstrœmia, *Species.*
Thit-sai, Burm., Buchanania latifolia, *Roxb.*
Thit-si, Burm., Melanorrhœa usitatissima, *Wall.*
Thittoo, Burm., Sandoricum, *Species.*
Thit-wa-jee, Burm., Armosia dasycarpa.
Thit-ya, Burm., Laurus, *Species*
Thohr, Hind., Euphorbia royleana.
Thorny caper-bush, Eng., Capparis horrida, *Linn.*
Thorny jack, Eng., Artocarpus chaplasha, *Roxb.*
Thorus maram, Can., Butea frondosa, *Roxb.*
Thossa of Kangra, Ficus roxburghii, *Wall.*
Thoun-ben, Burm., Artocarpus, *Species.*
Thoun-sanga, Burm., Myristica, *Species.*
Thoura Mahr., Conocarpus latifolia, *W. Ic.*
Three-leaved caper tree, Eng., Cratæva roxburghii, *R. Br.*
Three-leaved chaste tree, Eng., Vitex trifolia, *L.*
Thub-bo, Burm., Mimusops, *Species.*
Thub-bor, Burm., Uvaria, *Species.*

CSL

Thu[illegible]o, Burm., Ficus, *Species.*
Thu[illegible]nee, Burm., Bignonia, *Species.*
[illegible]g-goo, Burm., Laurus, *Species.*
Thum of Panjab, Fraxinus xanthoxylloides.
Thum of Kanawar, Paliurus aculeata.
Thumbugum, Tam., Shorea tumbuggaia, *Roxb.*
Thunare of Kumaon, Randia longispina, *DC.*
Thunella of Kumaon, Randia longispina, *DC.*
Thuppan, Burm., Ficus, *Species.*
Thu-ra-pe, Burm, Calophyllum, *Species.*
Thy-ka-dah, Burm., Erythrina, *Species.*
Tiaily of Tahiti, Aleurites triloba, *Forst.*
Tian of Sutlej, Ravi, Acer creticum, *Linn.*
Tige moduga, Tel., Butea superba, *Roxb.*
Tiger's milk tree, Eng., Excœcaria jamettia, *Spreng.*
Tikta-raj, Beng., Amoora rohituka, *W. & A.*
Tikta shaka, Sans., Cratæva roxburghii, *R. Br.*
Tikto-shak, Beng., Cratæva roxburghii, *R. Br.*
Tilea gurjun, Beng., Dipterocarpus lævis, *Buch.*
Tilia garjan, Rakh., Dipterocarpus angustifolius, *W. & A.*
Tiljor, Sw., Deals.
Tilkhan, Jhelum, Panj., Acer creticum, *Linn.*
Tilpatra of Jhelum and Kaghan, Marlea begonifolia, *Roxb.*
Tilpattan of Kangra, Panj., Acer creticum, *Linn.*
Timar, timmoor, timbur, tambar, timbru, of Jhullundhur, Kanawar, Ravi and Sutlej, Xanthoxylon hostile.
Timbal of Kangra, Ficus roxburghii, *Wall.*
Timberee-gass, Singh., Diospyros embryopteris *Persoon.*
Timberri, Singh., Embryopteris glutinifera, *Roxb.*
Timmal, tirmal, Tirmar of the Panjab, Chenab and Beas, Xanthoxylon hostile.
Tindu, Panj., Diospyros montana, *Roxb., W. Ic.*
Tinduki, Tel., Diospyros embryopteris, *Persoon.*
Tinian pine, Casuarina muricata, *Roxb.*
Tintili, Sans., Tamarindus indica, *Linn.*
Tintori, Beng., Tamarindus indica, *Linn.*
Tin-yoo-ben, Burm., Pinus khasyana, also P. massoniana, *Lamb.*
Tiricanamalay chettu, Tel., Berrya ammonilla.
Tiricanamalay maram, Tam., Berrya ammonilla.
Tiru kulli, Tam., Euphorbia tiraculli, *Linn.*
Tit-seim? Burm., Terminalia belerica, *Roxb.*
Titu, Mahr., Calosanthes indica, *Blainv.*
Ti-u of Hazara, Artocarpus integrifolia, *Linn.*
Tivva moduga, Tel., Butea superba, *Roxb.*
Tiyya mamidi, Tel., Mangifera indica, *Linn.*
Tng-tha, Burm., Dipterocarpus grandis ?
Toa of Tahiti, Casuarina equisitifolia.
Toaratti maram, Tam., Capparis divaricata, *Lam.*
Todigate vriksha, Can., Dalbergia latifolia, *Roxb.*
Toga tree Anglo-Tel. Morinda citrifolia, *Linn.*
Togari mogilli, Tel., Morinda exserta, *Roxb.*
Togaru, Tel., Morinda tinctoria, *Roxb.*
Togaru moduga, Tel., Butea frondosa, *Roxb.*
Toguru chettu, Tel., Morinda citrifolia, *Linn.*
Tonda maram, Tam., Terminalia belerica, *Roxb.*
Tondi chettu, Tel., Terminalia belerica, *Roxb.*
Tong-schi, Chin., Pinus excelsa, *Wall.*
Tonisha, Sans., Dalbergia oojeinensis, *Roxb.*
Tonkaya? Tel., The nut of Cocos nucifera, *Linn.*
Toour, Duk., Mahr., Cytisus cajan, *Linn.*
Tookee, Tel., Ebony.
Took kyan, Burm., Terminalia glabra, *W. & A.*
Toombika, Tel., also Toombi karra, Tel., Ebony
Toomi-chava karra, Tel., Ebony.
Toona, Hind., Mahr., Panj., Sans., Cedrela toona, *Roxb.*
Toon maram, Tam., Cedrela toona, *Roxb.*
Toon tree, Eng., Cedrela toona, *Roxb.*
Toovaray, Can., Tam., Cytisus cajan, *Linn.*
Topa nelli, Tam., Phyllanthus emblica, *Linn.*
Torch tree, Eng., Ixora parviflora, *Vahl.*
Tor jagga of Trans-Indus, Pavia indica, *Royle.*
Tos or Tosh of Chamba, Abies smithiana, *Wall.*
Totilla, Singh., Calosanthes indica, *Blainv.*
Touk-kyan, Burm., Terminalia arjuna, *W. & A.*
Touk-t'sa, Burm., Vitex arborea, *Roxb.*
Toun-bein, Burm., Artocarpus mollis, *Wall.*
Toung-ben, Burm., Artocarpus echinata, *Roxb.*
Toung-ga-la, Martaban, Ancistrolobus carneus, *Wall.*
Toung peing-nai, Burm., Artocarpus echinata, *Roxb.*
Toung-tha-lay, Burm., Garcinia roxburghii, *R. W.*
Toung-than, Burm., Xanthoxylon budrunga, *DC.*
Tounga-za-lat, Burm., Wrightia, *Species.*
Toun-pein-nai, Burm., Artocarpus, *Species.*
Tree fern, Eng., Cyathea arborea.
Tree galanga, Laurus glandulifera ? ? *Wall.*
Trekhana, Jhelum, Panj., Acer creticum, *Linn.*
Trichilia nervosa, *Vahl.*, syn of Sandoricum indicum, *Cav.*
Trichilia spinosa, *Willd.*, syn. of Atalantia monophylla, *DC.*
Trimbal of Kangra, Ficus roxburghii, *Wall.*
Trincomallee wood, Eng., Berrya ammonilla, *Roxb.*
Trithu, Panjab, Euonymus fimbriata, *Wall.*
Triviat putram, Tam., Bauhinia tomentosa, *Linn.*
True acacia tree, Eng., Acacia vera, *Bauh.*
True cinnamon tree, Eng., Cinnamomum zeylanicum, *Nees.*
Tsam-be-lay, Burm., Lagerstrœmia parviflora, *R.*
Tsapu—? Alnus, *Sp.*
Tsay-tham-by-ah, Burm., Gardenia lucida, *Roxb.*
Tseek-tha, Burm., Acacia sirissa? *Buch ?*
T'serdkar starbu Thibetan, Hippophaæ salicifolia.
Tshaw, Burm., Sterculia urens, *Roxb.*
T'sheik khyee, Burm., Sapindus, *Species.*
T'siampan, Jap., Red wood of Japan.
Tsiapangam, Tam., Cæsalpinia sappan, *Linn.*
T'sia-pangan, Maleal., Cæsalpinia sappan, *Linn.*
Tsiru panna, Maleal., Calophyllum calaba. *Linn.*
T'sjera samstravadi, Maleal., Barringtonia acutangula, *Gærtn.*
T'souk yo, Burm., also T'souk-yoa, Burm., D. alata ? Dalbergia ooata ? ?
T'sunt, Chung Seu, Kashu of Chenab. Pyrus malus.
Tuah of Kumaon, Bergera konigii, *Linn.*
Tubiki, Tel., Diospyros embryopteris, *Persoon.*
Tuccahaaloo-gass, Singh., Doona trapezifolia, *Thw.*
Tuj, Guz., Cinnamomum zeylanicum. *Nees.*
Tuki, Tel., Diospyros ebenum, *Linn.*
Tukla, Hind., Rottlera tinctoria, *Roxb.*
Tulenni, Panjab, Hamiltonia suaveolens, *Roxb*
Tulikukar, Hazara, Gardenia tetrasperma.
Tulip tree, Eng., Thespesia populnea, *Lam.*
Tulsa maram, Tam., Grewia asiatica, *Linn.*
Tumal, Beng., Hind., Diospyros tomentosa, *Roxb.*
Tumbai maram, Tam., also Tumbali maram, Tam., Diospyros melanoxylon, *Roxb.*
Tumbika, Tam., also Tumbikai, Tam., Embryopteris glutinifera, *Roxb.*, Diospyros embryopteris, *Pers.*

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[illegible] maram, Tam., Diospyros ebenum, *Linn.*
Tumbugai, Tam., Shorea tumbuggaia, *Roxb.*
Tumel, Tel., Embryopteris glutinifera, *Roxb.*
Tumida, Tel., Diospyros melanoxylon, *Roxb.*
Tumika? Beng., Diospyros embryopteris, *Pers.*
Tumika, Tel., Embryopteris glutinifera, *Roxb.*, Dyospyros embryopteris, *Persoon.*
Tumma chettu, Tel., Acacia arabica, *Willd.*
Tumma chettu, Tel., Diospyros melanoxylon, *R.*
Tummeda, Tel., Diospyros melanoxylon, *Roxb.*
Tummeda mamidi, Tel., Semecarpus anacardium.
Tummika, Tel., Diospyros melanoxylon, *Roxb.*
Tunda, Can., *Cedrela toona*, *Roxb.*
Tundi, Tel., Terminalia rubrica?
Tundu, Can., Cedrela toona, *Roxb.*
Tung, Beng., Duk., Rottlera tinctoria, *Roxb.*
Tung, Panjabi, Rhus parviflora, *Roxb.*
Tung, also Baghuna, also Larga of Panjab, Rhus cotinus.
Tung of Kanawar and Simla, Rhus cotinus.
Tung-guli, Jav., Cassia fistula, *Linn.*
Tungu, Panjab., Pistacia integerrima, *H. f. & Th.*
Tuni. Hind., Cedrela toona, var. serrata, *Royle.*
Tunki chettu, Tel., Diospyros melanoxylon, *Roxb.*
Tunna, Beng., Cedrela toona, *Roxb.*
Tunnus, Mahr., Dalbergia oojeinensis, *Roxb.*
Tuœtuka, Mahr., Stereospermum chelonoides, *W. Ic.*
Turi-turi, Oparo-Islands, Santalum album, *Linn.*
Turka vepa, Tel., Melia azedarach, *Linn.*
Turræa virens, Koen, syn. of Atalantia monophylla, *DC.*
Turseephul, Mahr., Chrysophyllum roxburghii, *G. Don.*
Turwar, Hind., Cassia auriculata.
Tut, Hind., also Tutri, also Krun, Mulberry, Morus alba; M. lævigata, M. serrata, M. parvifolia.
Tuwak, Malay., Borassus flabelliformis, *Linn.*
Twara mamadi, Tel., Xanthochymus pictorius, *Roxb.*
Twisted cypress, Cupressus torulosa, *Don.*

U

Uchyuta, Sans., Morinda tinctoria, *Roxb.*
Ude, Tam., Odina wodier, *Roxb.*
Udi, Tel., Spathodea rheedii, *Speng.*
Ud-i-bukhoor, Ud-i-chini, Ud-i-hindi, Ud-i-kamari, Ud-i-samudri, Hind., Pers., Eagle-wood, Aquilaria agallocha, *Roxb.*
Uduga, Tel., Alangium lamarkii, *Thwaites.*
Ugai, Panj., Fraxinus floribundus, *Wall.*
Ughai, Tam., Salvadora persica, *Linn.*
Ugnie munda, Sans., Premna integrifolia, *Roxb.*
Ugoor or Ag'r, Beng., Eagle-wood, Aquilaria agallocha, *Roxb.*
Uguroessa, Singh., Xanthoxylon rhetsa, *Roxb.*
Uguru, Beng., Excœcaria agallocha.
Ujhan, Panj., Tamarix orientalis, *L.*
Ukhan, Panj. Tamarix orientalis, *L.*
Ulimide, Tel., Cratæva roxburghii, *R. Br.*
Ullinda, Tel., Diospyros chloroxylon, *Roxb.*
Ulmus wallichiana, *Planch*, syn. of Ulmus campestris, *L.*
Ululu-gas, Singh., Machilus macrantha, *N.ab.E.*
Umbedher? Hind., Terminalia chebula, *Retz*, *W. & A.*, *Roxb.*
Umbrella Tree, Eng., Acacia planifrons, *W. & A.*
Umbuli, Cash., Tamarindus indica, *Linn.*
Umloke, Mehra forest, Hazara.
Umriti, Sans., En[illegible]a officinalis, *Gærtn.*
Unab, Ar., Zizyph[illegible]ujuba, *Willde.*
Unalee, Sing., Bambusa arundinacea, *Willde.*
Unarmed milk bush, Eng., Euphorbia tiraculli, *L*
Undi, Duk., Hind., Mahr., Calophyllum inophyllum, *Linn.*
Undooroo Karra, Tel., Briedelia, *Species.*
Undooroo wood, Ang-Tel., Briedelia, *Species.*
Undurugu manu, Tel., Sapindus rubigenosus, *R.*
Unkola nieochaka, Sans., Alangium lamarkii, *Thw.*
Unkoodoo karra, Tel.? Uncaria gambier? *R.*
Unkotha nieochaka, Sans., Alangium lamarkii, *Th.*
Unona longifolia, Dun., syn. of Guatteria longifolia, *Wall.*
Unona odorata, Dun., Uvaria odorata, *Lam.*
Unona tripetala, *DC.*, Syn., Uvaria tripetala, *R.*
Upas tree, Eng., Upas antiar.
Uppu ponna, Tel., Rhizophora mucronata, *Lam.*
a nakeru, Tel., Cordia myxa, *Linn.*
Uram pila, Maleal., Jack wood, Eng.
Uravada, Tel., Bruguiera parviflora, *W. & A.*
Urhur, Hind., Cytisus cajan, *Linn.*
Uriam, Assamese, Andrachne trifoliata, *Roxb.*
Urimeda, Sans., Vachellia farnesiana, *W. & A.*
Urimidi, Tel., Cratæva roxburghii, *R. Br.*
Urista, Sans., Sapindus detergens, *Roxb.*
Urjan, Hind., Terminalia arjuna, *W. & A.*, also Terminalia alata, Ainslie, *W. Ic.*
Urjuna, Duk., Urjun-sadra? Duk., Terminalia arjuna, *W. & A.*
Urostigma benghalense, *Miq*; syn. Ficus indica, *L.*
Urostigma religiosum, *Gasp.*, syn. of Ficus religiosa, *Roxb.*
Urrni of Jhelum. Corylus colurna, *L.*
Uru mutti, Tel., Cratæva roxburghii, *R. Br.*
Urus, Sans., Adhatoda vasica, *Nees.*
Utarosha, Sans., Adhatoda vasica, *Nees.*
Uruttah chandanam, Maleal., Pterocarpus santalinus, *Linn.*
Urval of Hazara and Murree, Rhododendron arboreum, *Sm.*
Usamaduga, Sans., Bauhinia tomentosa, *Linn.*
Usiki manu, Tel., Cratæva roxburghii, *R. Br.*
Usirika manu, Tel., Emblica officinalis, Gærtn.
Ussel ke abi ?? Ar ?? Vitex trifolia, *Linn.*
Ussl-i-suddir, Ar., Zizyphus jujuba, *Willde.*
Uswucunida, Sans., Shorea robusta, *Roxb.*
Utchola, Sans., Psidium pyriferum, *Linn.*, *Roxb.*
Utrasum, Tam., Elæocarpus lanceæfolius.
Utrasum bead tree, Ang-Tel., Elæocarpus ganitrus, *Roxb.*
Utti chettu, Tel., Maba buxifolia, *Pers.*
Uttuck, Mahr., Flacourtia montana, *Gibson.*
Uva maram, Tam., Dillenia speciosa, *Thunb.*
Uvaria cerasoides, *Roxb.*, syn. of Guatteria cerasoides, *Duval.*
Uvaria longifolia, *Roxb.*, syn. of Guatteria longifolia, *Wall.*
Uvaria lutea, *Roxb.* syn. of Alphonsea lutea, *H. f. & T.*
Uvaria monolifera, *Gærtn.*, Unona discolor, *Vahl.*
Uvaria villosa, *Roxb*, Milinsa velutina, *H. f. et T.*
Uvva-chettu, Tel., Dillenia speciosa, *Thunb.*

CSL

V

Vachellia farnesiana, *W. & A.*, syn. of Acacia farnesiana, *Willd.*

Vadatala maram, Tam., Dichrostachys cinerea, *W. & A.*

Vaday valli maram, Tam., Acacia farnesiana,

Vadenkurni maram, Tam., Bignonia xylocarpa, *Roxb.*

Vadom chettu, Tel., Terminalia catappa, *Linn.*

Vagesah wood, Anglo-Tel., Pterocarpus marsupium, *Roxb.*

Vajaya, Hind. of Nepaul, Pterocarpus marsupium *Roxb.*

Vakha, Tel., Areca catechu, *Linn.*

Valaga chettu, Tel., Feronia elephantum, *Corr.*

Valaiti amli, Duk., Garcinia cambogia, *Desrous.*

Valarasi, Tel., Walsura piscidia, *Roxb.*

Vallay murdah maram, Terminalia berryi, *W.&A.*

Valencurni maram, Tam., Bignonia xylocarpa, *Roxb.*

Van, Panj., Salvadora oleoides, *Dne.*

Vangay maram, Tam., Pterocarpus marsupium, *Roxb.*

Vangey wood, Anglo-Tam., Pterocarpus marsupium, *Roxb.*

Vani, Panj., Salvadora oleoides, *Dne.*

Vanr, Panj., Salvadora oleoides, *Dne.*

Varavada, Tel., Bruguiera parviflora, *W. & A.*

Vari of Salt Range, Quercus incana.

Varnish tree, Eng., Melanorrhœa usitatissima, *Wall.*

Varoona, Sans., Cratæva roxburghii, *R. Br.*

Vasanta gundu chettu, Rottlera tinctoria, *Roxb.*

Vata vriksha, Sans., Ficus indica, *Linn.*, *Roxb.*

Vatica laccifera, *W. & A.*, syn. of Shorea laccifera, *Heyne.*

Vatica robusta, *W. & A.*, syn. of Shorea robusta, *Roxb.*

Vatica tumbuggaia, *W. & A.*, syn. of Shorea tumbuggaia, *Roxb.*

Vattanghy, Tam., Cæsalpinia sappan, *Linn.*

Vavili chettu, Tel., Vitex trifolia, *Linn.*

Vaygah, Beng., Pterocarpus marsupium, *Roxb.*

Vaypa chettu, Tel., Melia azedarach, *Linn.*

Vaypum maram, Tam., Melia azedarach, *Linn.*

Veda-tara, Tam., Dichrostachys cinerea, *W. & A.*

Veda vully maram, Tam., Vachellia farnesiana, *W. & A.*

Vegi, Tel., Pterocarpus marsupium, *Roxb.*

Vegisa, Tel., Pterocarpus marsupium, *Roxb.*

Vekkali, Tam. of Ceylon, Conocarpus latifolia, *R.*

Vekkali maram, Tam., Vekkali tree wood.

Velaga, Maleal, Feronia elephantum, *Corr.*

Velanga, Pterospermum suberifolium, *Lam.*

Velago xylocarpa, Gærtn, syn. of Pterospermum heyneanum, *Wall.*

Vela kondrikam, Tam., Vateria indica, *Linn.*

Velam pisin, Tam., Gum of Acacia arabica, *Willd.*

Vela padri maram, Tam., Stereospermum chelonoides, *W. Ic.*

Vellituru, Tel., Dichrostachys cinerea, *W. & A.*

Velenge, Singh., Pterospermum suberifolium, *Lam.*

Veligaram chettu, Tel., Rottlera tinctoria, *Roxb.*

Veluturu, Tel., Dichrostachys cinerea, *W. & A.*

Velutta mandaram, Maleal., Bauhinia acuminata, *Linn.*

Vel-vaghai maram, Tam., Albizzia lebbek, *Benth.*

Vel-velam, Tam., Acacia leucophlœa, *Willde.*

Vel-velam, Tam., Acacia leucophlœa, *Willd.*, *A.* ferruginea, *DC.* ? ?

Vella cadamba, Tam., Nauclea cadamba, *Wall.*

Vella kondrikam, Maleal., Vateria indica, *Linn.*

Vella marda, Tam., Terminalia arjuna, *W. & A.*

Vella maram, Tam., Feronia elephantum, *Corr.*

Vellai marudu, Tam., Terminalia berryi, *W. & A.*

Vellai muntharai maram, Tam., Bauhinia acuminata, *Linn.*, also Bauhinia albida.

Vellai toaratti maram, Tam., Capparis grandis, *Linn.*

Vellay kungilam, Vateria indica, *Linn.*

Vellay murdah wood, Anglo-Tam., Terminalia berryi, *W. & A.*

Vellay putalli maram, Tam., Sterculia urens, *Roxb.*

Vellai-tumma, Tam., Acacia leucophlœa, *Willd.*

Vellanga maram, Tam., Feronia elephantum,

Vella nuchi, Tam., Vitex negundo, *Linn.*

Velle butalle maram, Tam., Sterculia urens, *Roxb.*

Velle naga maram, Tam., Conocarpus latifolia, *Roxb.*

Ven-bugum, Can., Lagerstrœmia macrocarpa, *Roxb.*

Vengay maram, Tam., Pterocarpus marsupium, *Roxb.*

Ven-taku maram, Tam., Lagerstrœmia macrocarpa, *Roxb.*

Ven-teak, Eng., Lagerstrœmia macrocarpa, *Roxb.*

Venuturu, Tel., Caillea cinerea, also Dichrostachys cinerea, *W. & A.*

Vepa, Tel., Azadirachta indica, *Ad. Juss.*

Vepali, Tam., Wrightia antidysenterica, *R. Br.*

Vepa manu, Tel., Melia azedarach, *Linn.*

Vepam maram, Tam., Azadirachta indica, *Juss.*

Veppalei arisi, Tam., Wrightia antidysenterica, *R. Br.*

Veppalei manu, Tel., Nerium antidysentericum, *Linn.*

Veppalei Tam., also Veppallay, Tam., also Veppaula, Tam., Wrightia antidysenterica, *R. Br.*

Vesha-mushti Sans., Strychnos nux vomica, *Linn.*

Veru panasa, Artocarpus integrifolia, *Linn.*

Verzino, It., Cæsalpinia sappan, *Linn.*

Veyala chettu, Tel., Vitex negundo, *Linn.*

Vi of Society Islands, Spondias dulcis, *Forst.*

Vibbituka, Sans., Terminalia rubrica ?

Vidi mara, Maleal., Cordia myxa, *Linn.*

Vidi maram, Tam., Cordia myxa, *Linn.*

Vilaiti kikar, Panjab, Acacia farnesiana, *Willd.*

Vilva chettu, Tel., Ægle marmelos.

Vilva maram, Tam., Ægle marmelos, *Cor.*

Vinuthi, Panjab, Fluggea virosa, *Roxb.*

Virampila, Tam., Jack wood, Eng.

Virugaduchava, Tel., Dalbergia latifolia, *Roxb.*

Visenia umbellata, Blain., syn. of Visenia velutina, *W. Ic.*

Vitex paniculata, Lam. syn. of Vitex negundo, *Linn.*

Vitex pubescens, *Wall.*, syn. of Vitex arborea *Roxb.*

Vitex saligna, *Roxb.*, syn. of Vitex leucoxylon, *Roxb.*

Vitti maram, Tam., Dalbergia sissoides, *Grah.*

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Vodi, Tel., Spathodea rheedii, *Spreng.*
Vodisa, Tel., Amanoa collina, *Baillon.*
Vomit nut tree, Eng., Strychnos nux vomica, *Linn.*
Vrash, also knitri of Beas, Rhus buckiamela, *Roxb.*
Vrukcham, Sans., Tree.
Vuckana maram, Tam., Diospyros cordifolia, *Roxb*
Vum-maai, Tam., Chloroxylon swietenia, *Roxb.*
Vuni, Tel., Acacia ferruginea, *DC.*
Vunni maram, Tam., Prosopis spicigera, *Linn.*
Vurtuli, Hind., Dichrostachys cinerea, *W. & A.*
Vutta thamare, Tam., Macaranga indica, *R. W.*

W

Waa-gass, Singh., Cassia florida, *Vahl.*
Wae koombha, Mahr., Careya arborea, *Roxb.*
Waghutty, Malay, Capparis grandis, *Linn.*
Waghz, Pasthu, Juglans regia, *Linn.*
Wagoo, Jav., Gnemium gnetum, *Linn.*
Wala, Panj., Salix babylonica, *Linn.*
Walbeling-gas, Singh., Ailantus malabaricus, *DC.*
Wal boamboo, Singh., Eugenia laurina?
Waldombe, Singh., Calophyllum acuminatum?
Wal-jambo-gass, Singh., Jambosa aquea, *DC.*
Wal-kakunu-gaha, Singh., Desmostemon zeylanicus, *Thw.*
Walkera serrata, *Willde.*, *DC.*, Prod., syn. of Gomphia angustifolia, *Vahl.*
Wal-kopee, Singh., Scyphostachys coffeoides, *Thw.*
Walla-gaha, Singh., Gyrinops walla, *Gært.*
Wallu-keena, Singh., Calophyllum moonii, *Wight.*
Wallurasi, Tel., Walsura piscidia, *Roxb.*
Walnut, Mehra forest, Hazara, Juglans.
Wal-sa-pu, Singh., Michelia nilagirica, *W. Ic.*
Walsura, Tam., Walsura piscidia, *Roxb.*
Walu luway, Singh., Amygdalus communis, *Linn.*
Wana maddiya-gass, Singh., Ficus asperrima, *Roxb.*
Wanna, Panj., Salvadora oleoides, *Dne.*
Warangan, Malay? Ficus benjamina, *Linn.*
Wara-tara, Tam., Dichrostachys cinerea, *W. & A.*
Warrus, Mahr. Bignonia quadrilocularis, *Roxb.*
Water dalbergia, Eng., Dalbergia, *Species.*
Wathamman, Salt Range, Celtis caucasica, *Willde.*
Wattal, Panj., Euonymus fimbriata, *Wall.*
Wave-leaved bignonia, Eng., Bignonia undulata, *Roxb.*
Wayal-aku, Tel., Vitex negundo, *Linn.*
Weavers' beam tree, Eng., Schrebera swietenoides, *Roxb.*
Webb's fir, Eng., Pinus webbiana, *Wall & Lamb.*
Webb's pine, Eng., Picea webbiana, *Lamb.*
Webera corymbosa, *Sm.*, *Herb.*, Ixora parviflora, *Vahl.*
Webera corymbosa, *Willde*, syn. of Stylocorina webera, *A. Rich.*
Webera cymosa, *Willd.*, syn of Canthium didymum, *Gært.* ?
Webera tetrandra, *Willde.*, syn of Canthium parviflorum, *Lam.* ?
Veenong of Java, Tetrameles nudiflora, *R. Br.*
Weeping willow, Eng., Salix babylonica, *Linn.*
We lipiyanna, Singh., Anisophyllum zeylanicum.
We ppa, Maleal., Azadirachta indica, *Ad. Juss.*
Wesha, N. W. Him., Abies smithiana, *Wall.*
W ham-pi, Chin., Cookia punctata, *Ret.*
White Accn, Anglo-Hind., Terminalia arjuna, *W. & A.*
White bauhinia, Eng., Bauhinia acuminata, *Linn.*, Bauhinia albida.
White Cedar, Eng., Melia azedarach, *Linn.*, also Vitex altissima, *Linn.*
White Cotton tree, Eng., Eriodendron anfractuosum, *DC.*
White Dammar tree, Eng., Vateria indica, *Linn.*
White Guava, Eng., Psidium pyriferum, *Linn.*
White Injin, Anglo-Burm., Injin pewoo, Burm.
White Mangrove, Eng., Avicennia tomentosa, *L.*
White Mountain ebony, Eng., Bauhinia candida, var.
White Sandal wood, Eng., Santalum album, *Linn*
White Thayat, Anglo-Burm, Sibia glomerata.
White Thorn, Eng., Cratægus crenulata, *Roxb.*
White Willow, Salix alba, *Linn.*
Whonay, Can., Pterocarpus marsupium, *Roxb.*
Whong-pi, Chin., Cookia punctata, *Ret.*
Whonnay, Can., Pterocarpus santalinus, *Linn.*
Wilaiti kikar, Vachellia farnesiana, *W. & A.*
Wilaiti kikar of the Panj., Parkinsonia aculeata, *Linn.*
Wilampi, Maleal., Averrhoa bilimbi, *Willde.*
Wild Bread-fruit tree, Eng., Artocarpus hirsuta, *Lam.*
Wild Caper, Eng., Capparis aphylla, *Roxb.*
Wild Cinnamon, Eng., Cinnamomum iners, *Nees.*
Wild Cinnamon tree, Eng., Eugenia acris, *W. & A.*
Wild Clove tree, Eng., Eugenia acris, *W. & A.*
Wild Date, Eng., Phœnix sylvestris *Roxb.*
Wild Fig, Eng., Ficus caricoides.
Wild Jack wood, Eng., Hebalsu, Can.
Wild-Lime, Eng., Atalantia monophylla, *DC.*
Wild Mango tree, Eng., Spondias mangifera.
Wild Mangosteen, Eng., Embryopteris glutinifera, *Roxb.*
Wild Plum, Eng., Prunus padus, *Linn.*
Wild Sapota Tree, Eng., Bassia longifolia, *Linn.*
Willa, khar willa, Pushtu, Salix babylonica, *Linn*
Winri of Kashmir, Corylus colurna, *L.*
Wiri of Chenab, Corylus colurna, *L.*
Woadugu maram, Tam., Amanoa collina, *Baillon.*
Woda chinta chettu? Tel., Garcinia cambogia, *Desrous.*
Wodale or wothale, Tam., Acacia catechu, *Willd.*
Wodesha, Tel., Amanoa collina, *Baillon.*
Wodi, Tel., Spathodea rheedii, *Spreng.*
Wæwarana-gaha, Singh., Alseodaphne semicarpifolia.
Wond maram, Tam., Soymida febrifuga, *Ad. Juss.*
Wonga maram, Tam., Soymida febrifuga, *Ad. Juss.*
Wontay, Can., Garcinia cambogia, *Desrous.*
Wood-apple tree, Eng., Feronia elephantum *Corr.*
Wood charcoal, Eng., Charcoal.
Wood oil tree, Eng., Dipterocarpus lævis, *Buch.*, also Dipterocarpus elatus, *Roxb.*
Wormia coromandeliana, *Spreng.* syn. of Dillenia pentagyna, *Roxb.*
Wormia retusa, *H. f. et T.*, syn. of Dillenia retusa, *Thunb.*
Wowlee, Mahr., Ulmus integrifolia, *Roxb.*
Wrightia antidysenterica, *R. Br.*, syn. of Nerium antidysentericum, *Linn.*

Wul[illegible]nay, Can., Pterocarpus marsupium, *Roxb.*
Wunna mara, Can., Calophyllum inophyllum, *Linn.*
Wumb, Mahr., Nephelium longan, *Camb.*
Wunja maram, Tam., Albizzia amara, *Boivin.*
Wunjooli maram, Tam., Cedrela toona, *Roxb.*
Wurak, Pushtu, Rhamnus virgatus, *Roxb.*
Wuraska, Pushtu, Dodonæa burmanniana, *DC.*
Wuria, of Chenab, Corylus colurna, *L.*
Wyala, Tel., Vitex negundo, *Linn. Roxb. W. Ic.*

X

Xanthochymus spicatus, *W. & A.*, syn. of Xanthochymus ovalifolius, *Roxb.*
Xanthoxylon zeylanicum, *DC.*, *Prod.*, syn. of Xanthoxylon triphyllum, *Juss.*
Ximenia ægyptiaca, *Roxb.*, syn. of Balanites ægyptiaca, *Delile.*
Ximenia americana, *Linn.*, syn. of Balanites ægyptiaca, *Delile.*
Xylia dolabriformis, Berich., Inga xylocarpa, *DC.*
Xylo-aloe, Lat., Eagle wood.

Y

Ya-gi-ne, Burm., Rottlera, *Species.*
Yai-yoe, Burm., Morinda bracteata, *Roxb.*
Yamana, Burm., Gmelina arborea, *Roxb.*
Yamula, Burm., Euphorbia, *Species.*
Yang-ma, Chin., Eriobotrya japonica, *Lindley.*
Yapa chettu, Tel., Venga maram, Tam.
Yari, Yero of Kashmir, Pinus excelsa, *Wall.*
Yarpa of Lahoul, Populus balsamifera, *Linn.*, also Populus nigra, *L.*
Yarviney, Tam., Iarvini, Tam.
Yegah, Beng., Pterocarpus marsupium, *Roxb.*
Yegassi karrah, Tel., Pterocarpus marsupium, *R.*
Yegis ? Tel., Pterocarpus marsupium, *Roxb.*
Yegree, Tel. of the Godavery, Pterocarpus marsupium, *Roxb.*
Yegy, Beng., Pterocarpus marsupium, *Roxb.*
Yekela, Can., Mahr., Terminalia belerica, *Roxb.*
Yekaddee, Mar., Pittosporum floribundum, *W. & A.*
Yels kae, Can., Caryota urens, *Linn.*
Yel-pote, *Lepcha*, Bassia butyracea.
Yel-tur, Tel., Dichrostachys cinerea, *W. & A.*
Yellandy maram, Tam., Zizyphus jujuba, *Willde.*
Yella-nir, Tam., water or albumen of Cocos nucifera, *Linn.*
Yella-niru, Tel., water or albumen, of Cocos nucifera, *Linn.*
Yellow bauhinia, Eng., Bauhinia tomentosa, *Linn.*
Yellow sandal wood, Eng., Santalum album, *Linn.*
Yemaneh, Burm., Gmelina arborea, *Roxb.*
Yendike, Burm., Dalbergia, *Species.* Ebony, also Dalbergia latifolia, *Roxb.*
Yepa chettu, Tel., Azadirachta indica, *Ad. Juss.*
Yepi ? vriksha, Can., Venga maram, Tam.
Yercum, Tam., Calotropis gigantea, *R. Br.*
Yerool, Can., Inga xylocarpa, *DC.*
Yerra-chava karra, Tel., Dalbergia sissoo, *Roxb.*
Yerra goodda-chava carra, Tel., Rosewood.
Yeru, Mahr., Andgeri, Can.
Yerrugudu, Tel., Dalbergia latifolia, *Roxb.*
Yetega, Can., also Yetegal, Can., Nauclea parvifolia, *Roxb.*
Yeetlay-ga, Can., Nauclea cordifolia, *Roxb.*
Yetti-cotay maram, Tam., Strychnos nux vomica, *Linn.*
Yetti maram, Tam., Strychnos nux vomica, *Linn.*
Yew of Mehra forest, Hazara.
Yimma, Burm., Chickrassia tabularis, *Ad. Juss.*
Yin-bya, Burm., Ancistrolobus mollis.
Yin-gat, Burm., Gardenia coronaria, *Buch.*
Yriu-Quercus ilex, *Linn.*
Yau-dine, Burm., Dalbergia, *Species.*
Young-tha-ji, Burm., Xanthoxylon budrunga, *DC.*
Youg-tha-ngai, Burm., Abrus, *Species.*
Young-mai, Chin., Eriobotrya japonica, *Lindley*
Young zalai, Burm., Garcinia, *Species.*
Yoong, Burm., Conocarpus acuminatus, *Roxb.*
Yserhout, Dut., Iron wood.
Yucca-naara-gass, Sing., Sclerostylis ceylanica, *W. I.*
Yuga putra, Sans., Bauhinia candida, var.
Yulatta, Panj., Populus nigra, *Linn.*
Yumbok, Panjab, Ulmus erosa? and U. pumila, *Pall.*

Z

Zaitun, also schwan, Pushtu, Olea europæa, *L.*
Zamb chule of Kangra, Prunus padus, *Linn.*
Zard Alu, Pers., Armeniaca vulgaris.
Zard-aru, Pushtu, Prunus armeniaca.
Zaza, Burm., Careya, *Species.*
Zaza, Burm., Gordonia, *Species.*
Zeder, Ger., Cedar.
Zeghal-i-chobi, Pers., Charcoal.
Zhikak of Kanawar, Daphne oleoides.
Zim-boon, Burm., Dillenia, *Species.*
Zim-byoon, Burm., Dillenia aurea, *Sm.*
Zimma, Burm., Chickrassia tabularis, *Ad. Juss.*
Zimmet kanehl, Ger., Cinnamomum zeylanicum, *Nees.*
Zin-byewn, Burm., Dillenia augusta, *Roxb.*
Zin-ga-læ, Tavoy, Ancistrolobus carneus, *Wall.*
Zin pyun ngan, Burm., Dillenia, *Species.*
Zarul, Ar. ? Zizyphus jujuba, *Willde.*
Zi-thu, Burm., of Tavoy, Castanea martabanica.
Zi-thi, Burm., Zizyphus, *Species.*
Zizyphus caracutta, Roxb., syn. of Zizyphus xylopyrus, *Willd.*
Zizyphus elliptica, *Roxb.*, syn. of Zizyphus xylopyrus, *Willd.*
Zizyphus hortensis, syn. of Zizyphus jujuba, *Willde.*
Zizyphus hysudricus, syn. of Zizyphus jujuba, *Willde.*
Zizyphus microphylla, *Roxb.*, syn. of Zizyphus nummularia, *W. & A.*
Zizyphus oppositifolia, *Wall.*, syn. of Sageretia oppositifolia, Brogn.
Zizyphus orbicularis, *Schult*, syn. of Zizyph xylopyrus, *Willde.*
Zizyphus rotundifolia, Lam, syn. of Zizyphus nummularia, *W. & A.*
Zizyphus sororia, *Schult*, syn. of Zizyphus jujuba, *Willde.*
Zizyphus trinervia, *Roxb.*, syn. of Zizyphus glabrata, *Heyne.*
Zoz, Trans-Indus, also Zozan, Trans-Indus, Alhagi maurorum, *Tourne.*
Zoung yah, Burm., Averrhoa carambola, *Linn.*
Zugal, Ar., Charcoal.

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